

Disrupting the market for trafficking of rhino horn and ivory

Mai Sato

University of Reading, UK
Email: m.sato@reading.ac.uk

Mike Hough

Birkbeck University of London, UK
Email: m.hough@bbk.ac.uk

Abstract: *This paper considers methods for regulating the trafficking of rhino horn and ivory, seen through the lens of compliance theories. It stresses the importance of the distinction between normative and instrumental motivations. It argues for a balanced set of strategies that include normative levers designed to change the behaviour of poachers, traffickers and consumers of these products. In particular it considers the options needed to achieve demand reduction in consumer countries, and those needed to provide incentives to local communities in producer countries to disengage from poaching.*

Keywords: Wildlife poaching; rhino horn; ivory; procedural justice; compliance theories

Introduction

This paper develops a conceptual framework within which to develop policies for the regulation of forms of wildlife trafficking. The framework is intended to be adaptable for a range of trafficking activities, but our framework uses the example of trafficking of illicit rhino horn. There are close similarities between the trafficking of rhino horn and of ivory, and some reference is also made to the latter. We have chosen to focus on horn and ivory, because these markets are highly complex, whose social distance from European crimes makes it heuristically rich.

We shall argue that the distinction between instrumental and normative strategies is a crucial one. Politicians instinctively reach for instrumental ones – primarily those involving criminalization and the use of deterrent threat – but opportunity reduction, obstruction and surveillance also figure here. If these are the obvious and more traditional criminal policy response to tackle wildlife crime, we would argue that more attention should be paid to normative policies. Normative approaches – which aim to change behavioral norms and values – have not been properly examined by research. Studies routinely contain concluding recommendations for a multifaceted approach and recognize the importance of raising awareness and education. But the evidence base on normative strategies, and especially those that focus on demand reduction, remains thin. It is unclear what normative approaches are currently being used, who is using them, and whether they secure a positive response from consumers.

Academic Literature – from Conservation to Crime Control

Besides journals which focus specifically on wildlife protection, the bulk of the academic literature on wildlife crime appears in natural science journals¹. Articles published in criminology journals are still sporadic though they seem to be receiving greater attention in recent years (e.g. Naylor 2004; War-

¹*IngentaConnect* was used to review literature on wildlife trafficking in natural and social sciences.

chol 2007; Schneider 2008; Lemieux & Clark 2009; Wyatt 2009; Pires & Moreto 2011; South & Wyatt 2011; Wyatt 2011; Cao & Wyatt 2013; Kalron 2013).

Almost all natural science publications that we reviewed argued for better ‘scientific management and monitoring’ (Seidensticker 2010: 285) of wildlife trade (e.g. Wasser et al. 2004; Blundell & Mascia 2005; Alacs & Georges 2008; Gerardo & Ferriss 2008; Gerson et al. 2008; Wasser et al. 2008; Alacs et al. 2010; Barber-Meyer 2010; Meyers et al. 2010; Percipalle et al. 2010; Rosen & Smith 2010; Seidensticker 2010; Fa et al. 2013). The underlying assumption is that while trafficking of wildlife is estimated to be a multi-billion dollar industry with plants and animals being trafficked each year, wildlife records are ‘notoriously unreliable’ (Blundell & Mascia 2005: 2010) and that ‘scientists have yet to describe the scope and scale of the trade.’ (Rosen & Smith 2010: 24). The reviewed articles proposed various ways in which recent scientific developments can contribute to the reduction of wildlife trafficking:

DNA assignment analysis to help determine the product origin where ivory from African elephants is being removed (Wasser et al. 2004; Wasser et al. 2008); a complementary coding system where by customs authorities adopt an existing taxonomic classification system to standardize, organize and capture wildlife trade data (Gerson et al. 2008); increased collaboration with forensic scientists and conservation geneticists to provide a scientific basis for the development of forensic methods (Alacs & Georges 2008; Alacs et al. 2010); a DNA bar-coding system to monitor endangered species for investigating semi-processed or morphologically indistinguishable wildlife products (Meyers et al. 2010); and the improved identification of hotspots threatened by bush meat trade (Fa et al. 2013).

There are divergent views in these natural science papers on how the data should be used. Some argue data should be used to develop effective ‘conservation’ policy (Barber-Meyer 2010) and various projects to protect wildlife (e.g. Blundell & Mascia 2005; Gerardo & Ferriss 2008; Gerson et al. 2008; Barber-Meyer 2010; Kagande & Musarurwa 2014). Others believe scientific techniques can be used specifically for ‘crime control’ policy aimed at prevention, detection, arrest and prosecution. These papers express a general concern about the low levels of law enforcement (Yu-Ming et al. 2000; Alacs & Georges 2008) and an expectation that better scientific techniques and better quality data should and can be used in tackling wildlife crime (e.g. Yu-Ming et al. 2000; Wasser et al. 2004; Alacs & Georges 2008; Alacs et al. 2010; Wasser et al. 2008; Barber-Meyer 2010; Meyers et al. 2010; Percipalle et al. 2010; Fa et al. 2013). Wasser et al. (2008: 1,070) write for example: DNA analyses of the project can help inform authorities how crime syndicates are operating and where to concentrate law-enforcement efforts to stop poaching at its source. Identifying the origin of poached products additionally forced countries to take responsibility for the illegal killing of their wildlife by exposing them to CITES and other internationally enforced sanctions. Cutting off supply can also help thwart the long history of ineffective prosecution of illegal wildlife traffickers in consumer countries.

The call for firmer law enforcement that characterizes the natural science papers – as showcased in the above quote – is premised on the assumption that catching and punishing the ‘offender’ is the solution to wildlife crime.

In the criminological literature, authors acknowledge that wildlife trafficking – often categorized as part of ‘green criminology’ – receives ‘little attention from the criminological community’ (Wyatt 2011: 103). The limited literature tends to focus on the modus operandi. For example Wyatt’s (2009 and 2011) work on the falcon trade in Russia looked at the mechanics of the illegal trade: who is involved, how it is occurring and where it is taking place. South & Wyatt (2011) compared the trafficking of wildlife and drugs, examining the size of markets and the smuggling operations. Warchol (2007) provides a descriptive analysis of the illegal market in terms of species in demand in South Africa and Namibia, and of the profile of poachers and traffickers. Kalron (2013) criticized the current African anti-poaching and anti-trafficking operations as lacking sophistication and determination, giving criminal organisations an easy ride.

These studies share with natural science papers the advocacy of better law enforcement to curb supply. Exploring the linkage between drug and wildlife smuggling operations, South & Wyatt (2011:

557) argue that the illegal wildlife trade has not attracted the same level of law enforcement resources as ‘the war on drugs’, and argue that ‘law enforcement in both of these areas need to cooperate and share intelligence in order to combat both of these smuggling operations’. Kalron (2013) is probably most outspoken about the need for supply-side strategies that crack down on poaching and trafficking. He argues: ... conservation today, at least with regard to several species and regions, is an actual war in the military sense of the word... poaching is no longer a conservationist’s or wildlife management problem; it is a national security crisis that needs a national security response. As mentioned above, the need to move from traditional anti-poaching operations to more sophisticated counter-guerrilla warfare is crucial (Kalron 2013: 163).

However, not all criminologists propose that heavier policing and punishment is the only way forward in managing wildlife trafficking. Pires & Moreto (2011) - through the examination of trade in parrots, wildlife skins and over-fishing - propose a combination of situational crime prevention techniques and the promotion of local incentives to deflect people from poaching. Naylor (2004) offers a historical account of the illicit ivory trade and argues that the heart of the problem and the solution lies with demand. The following quote is a sharp contrast to that of Kalron (2013) above and the other studies calling for supply reduction.

...whatever mix of incentives (to conservation) and disincentives (to unregulated trafficking) may be introduced, it must never be forgotten that protecting wildlife from poachers and smugglers is a necessary but not a sufficient condition to ensure the prosperity of other species. The ultimate regulation necessary is not an effort to control the traffic in this or that form of wildlife, but an attempt to ease and, where possible, reverse the pressures which human beings, with their increasing numbers, their rising consumption levels and their destructive technologies, place on the biosphere as a whole. (Naylor 2005: 291).

This article aligns itself with Naylor’s (2004) conclusion that demand reduction of wildlife trade needs to be tackled in consumer countries and that more efforts should be made in understanding values and culture in consumer countries relevant to the conservation of wildlife (Turner 2004; Singh 2008; Sebele 2010; Tisdell et al. 2010; Yu 2010; Pires & Moreto 2011; Ayling 2013a; Ayling 2013b; Phelps et al. 2013; Ferrie et al. 2014). Previous studies have proposed a multifaceted approach and point out the importance of raising awareness and education. The evidence base on normative strategies, and those that focus on demand reduction, however, remains to be properly explored. This article examines what normative approaches are currently being used, who is using them, and whether they secure a positive response from consumers.

Main Framework – Durkheim’s Duality of Human Nature

We think it is helpful to go back to one of sociology’s founding fathers to find a conceptual framework for framing policies to manage wildlife trafficking. The distinction between instrumental and normative motivation, which is central to our analysis, derives from Durkheim (1915), who proposed a basic duality in human nature: people’s individual personalities coexist with a shared and socially constructed morality. He proposed that variations in personalities could account for differences in self-interested behavior, but in accounting for moral behavior one also had to make reference to the conscious collective.

Policies of social control that are built on assumptions about self-interest are distinct from those that take account of the conscious collective. The former consists of instrumental strategies that manipulate the costs and benefits of behavior. In the context of wildlife products, effort is usually focused on deterrent strategies targeting poachers and traffickers rather than consumers. However there are also secondary instrumental strategies, such as situational crime prevention techniques involving surveillance, opportunity reduction, obstruction and target removal. Examples include the tagging of rhino horn and the dehorning of rhinos.

Policies that exploit features of the conscious collective are normative in their approach, mobilizing or extending people’s moral commitment to protect wildlife. The target audience of this approach is

typically, but not exclusively comprised of consumers. (Local communities in poaching areas are also potential target audiences.) Examples include campaigns launched by NGOs and ‘soft power’ diplomacy by politicians. Normative demand reduction strategies aim to shrink the market demand for goods through moral persuasion. In reality, some regulatory strategies are neither exclusively normative nor purely instrumental, but a combination of the two. An example of such a hybrid policy can be found in strategies to co-opt local communities into opposition to poaching by both providing a self-interested incentive (for example by sharing the income from tourism) and a normative one. In conservation terms, this may be termed utilitarian ecology as it values nature for the end-use of human needs and the economic value of eco-tourism – whilst achieving conservation (Stoett 2002).

Before examining each policy, we should say a little about legalization (or decriminalization) of currently illicit wildlife markets. This is an approach which – depending on how it is put into practice – is neither instrumental nor normative. A counsel of despair would be to suggest that the costs of control will inevitably exceed the benefits of conservation, and that the only realistic approach is to decriminalize, deregulate and accept the inevitable extinction of rhino and elephant. We include such an option not as a serious contender for consideration, but only for the sake of completeness of analysis – though some pessimists see this outcome as inevitable (Naylor 2005; Ayling 2013a).

There are intermediate positions, however, between unregulated legalization and criminalization. In 2012, a South African conservationist proposed to the International Wildlife Management Congress that the trading of rhino horns should be legalized (Ayling 2013a). The sale would be strictly regulated by establishing government-owned or government-regulated agencies that would sell legal horns to certified Asian pharmaceutical companies (Ayling 2013a). In theory, legalization would reduce the demand for illegal horns by flooding the market with legitimate horn. However, legalization could have the perverse effect of stimulating the market, to a point at which demand could not be met simply by licit supplies. There are added problems with the approach. First, ‘production costs’ would inevitably be lower for poachers than for farmers, so that the incentive to poach and traffic would remain. Secondly, the very process of legalization would undermine any accompanying normative strategies to reduce demand. In other words, legalization as a policy is inconsistent with any attempts to shape the normative climate that surrounds the purchasing of horn.

Instrumental Approaches: Prosecution, Armed Response and Situational Crime Prevention

South Africa reports a worrying increase in rhino poaching. In 2010, 333 were poached, which grew to 448 in 2011, 668 in 2012 and 946 in 2013 – with annual projections exceeding a thousand by the end of 2014 (South African Department of Environmental Affairs)². In recent years, law enforcement authorities in South Africa have responded to the escalating amount of poaching with stricter penalties, more rangers on the grounds, more weaponry, and military patrols (Ayling 2013a). The South African arrest statistics reflect the increased efforts made with 165 arrests in 2010, and 330 in 2013 (Department of Environmental Affairs 2013). Similar initiatives are noted elsewhere, including Kenya.

While South Africa may be putting increasing efforts into punishing those involved in wildlife crime, Ayling (2013a; 2013b) is skeptical that deterrence through law enforcement can prevent wildlife trafficking to a significant degree:

The rewards of the crime are in many cases so great, and the execution of the crime so uncomplicated... punishment for environmental crime is anything but certain. Once common criticism relating to the treatment of TEC (Transnational Environmental Crime) is that it has been ‘woefully neglected’ by states, with penalties set at far too low a level and enforcement against offenders often lax. (Ayling 2013b: 340).

Even where tough laws do exist, it is difficult to prove beyond all reasonable doubt that a poacher is guilty. To ensure a successful prosecution, it often requires DNA analysis linking the rhino carcass,

²See Department of Environmental Affairs in South Africa:
https://www.environment.gov.za/mediarelease/update_on_rhino_poaching

the horn and the poacher, but the expertise is often not available for this type of sophisticated analysis (Adams 2012). States are increasingly using scientific techniques to detect and prosecute, as well as using situational crime prevention techniques to make it impossible or more difficult to poach. These include dehorning, poisoning horns, GPS tracking of rhinos, and DNA bar-coding (e.g. Alacs & Georges 2008; Alacs et al. 2010; Barber-Meyer 2010; Meyers et al. 2010; Ayling 2013a; Fa et al. 2013).

Law enforcement officers, however, are not the only ones relying on high-end equipment and scientific techniques. Poachers range from poor villagers to organized crime syndicates who take horns themselves or provide incentives for villagers to do so (Pires & Moreto 2011; Ayling 2013a; Kalron 2013). Therefore, some poachers have access to advanced technologies to kill or disable the animals, including helicopters, night vision goggles, tranquilizing drugs, high-powered weapons and silencers (Ayling 2013a). Furthermore, poaching and trafficking strategies are constantly renewed and are often sophisticated enough to penetrate the agencies tasked with stopping them (Kalron 2013; Kagande & Musarurwa 2014). This makes instrumental approaches costly – if deployed with sufficient intensity to have any real effect.

In addition, controlling the trafficking of wildlife is complicated by its multijurisdictional nature. It is difficult to establish and manage effective cross-border collaboration (Ayling 2013b) and disparity in sentencing policies between countries makes it even more difficult for all countries involved to make wildlife trafficking a priority. For example, in Zambia, offenders convicted of possession or poaching of rhino horn can receive a sentence of 20 years. In Kenya, the penalty for poaching was until recently simply a fine (Adams 2012). Recent Kenyan legislation now provides for lengthy prison sentences, however.

Corruption also adds to the difficulty of pursuing the offenders at the top of the trafficking chains that instrumental policies attempt to target. Warchol (2004) found through interviews conducted with US embassy officials in South Africa and Namibia that corruption is endemic among low-paid law enforcement officers, and that embassy staff from Asia and the Middle East are also involved in the illegal trade. He also notes that corruption is not limited to officials but widespread among managers of game reserves, employees of safari hunt companies and rangers in national parks (Warchol 2004; Ayling 2013b). Prosecution – if it happens – tends to be focused on the most marginalized groups involved in low-level activity rather than those involved at a higher level.

The most extreme form of instrumental policy used in controlling horn and ivory poaching is armed response, sometimes referred to as ‘shoot to kill’. This strategy is adopted by many national parks game reserves such as in Zimbabwe, South Africa, Kenya and India, and allows police or civilian rangers to shoot the poachers – also often heavily armed – as a last resort in self-defence³. The legal protection afforded to rangers who shoot poachers varies from jurisdiction to jurisdiction; sometimes the rangers have the status of police reservists. It is reported that ‘shoot to kill’ in some jurisdictions is not only tolerated but sometimes encouraged (and rewarded where bravery is shown), to maximize deterrent impact⁴. In Kaziranga for example, the forest guards have immunity from prosecution for shooting a poacher, whether in self-defence or as a proactive ambush or attack (Warchol 2004).

Armed response strategies of this sort raise difficult ethical issues. Whether protocols are in place – and are actually used – to regulate rangers’ use of lethal force will vary from jurisdiction to jurisdiction. Whether the basic intention of the armed response is to secure arrests or actually to shoot the poachers is arguably immaterial in situations where armed resistance is encountered. Perhaps the key ethical – and legal – issue is whether reasonable efforts are made to secure arrests, prior to the use of firearms.

As jurisdictions improve their detective and prosecutorial capacity, and as court sentences are toughened up, it remains to be seen whether these instrumental strategies achieve any real purchase

³Save the Rhino, ‘Shoot to Kill?’ : http://www.savetherhino.org/rhino_info/thorny_issues/shoot_to_kill

⁴In Kaziranga National Park, India, forest guards receive a cash bonus to their salary if they successfully wound and kill a poacher.

on the problem. On the one hand, the available penalties facing poachers are becoming much more severe – and if they resist arrest they run a significant risk of being shot. On the other hand, there has been little or no read-across to wildlife trafficking from the lessons about supply reduction strategies in drug trafficking. MacCoun and Reuter (2001) have argued that supply-side strategies to contain drug smuggling can have a range of perverse effects. A basic economic principle is that markets translate risk into price. If law enforcement strategies increase the risks of detection and punishment, in markets where demand is buoyant this will simply increase the cost of the product – and make the market more lucrative for those who are prepared to remain in business. And it is important to ask who is most likely to remain within increasingly risky markets: risk drives out the risk-averse, making illicit drug markets increasingly violent. Finally, in drug trafficking at least, the process of removing key participants from the trafficking process creates ‘employment opportunities’ or ‘promotion opportunities’ for others. For these reasons, drug trafficking systems have proved highly resilient in the face of enforcement. At present, it is unclear whether similar considerations apply to the trafficking of horn and ivory.

A less aggressive form of instrumental strategy is to focus on prevention rather than dealing with the crime post-hoc through the criminal justice system. A situational crime prevention technique such as dehorning, which renders rhinos worthless to poachers – at least until their horns regrow – may seem like a promising policy. While dehorning is reported to have contributed to the protection of rhinos in Namibia in the 1990s and more recently across other African nations, there are downsides to this practice⁵. Dehorning is costly and needs to be repeated two or more times over the life of a rhino. There is also security cost involved in protecting horns against theft, following dehorning⁶. It is also an intrusive procedure, with risks to the rhino during operations. A further critique – which is leveled at most situational crime prevention techniques – is that dehorning does nothing to address the root causes of poaching such as economic deprivation and societal inequality that exist in these countries (von Lampe 2011; Ayling 2013b). The weight that should be attached to this critique depends on the extent to which blocked opportunities for poaching of rhinos lead to displacement to other forms of poaching, or indeed, other forms of crime. The evidence about displacement – drawn from other forms of offending – is that opportunity reduction rarely results in 100% displacement.

Normative Approaches: Soft Law, Soft Power Diplomacy and Campaigns

As noted above, normative approaches involve reshaping shared norms and values – or to use Durkheimian language, it is about extending the conscious collective. In the case of trafficking of horn and ivory, normative strategies have focused largely on demand reduction, and three main approaches have been followed: the development of international law; the use of ‘soft power diplomacy’; and publicity campaigns.

In approaches relying on international law and soft power diplomacy, the aim is to stimulate state-level intervention which in turn – it is hoped – will have an impact on the publicly shared norms and values of citizens in those states. Publicity campaigns, by contrast, aim to achieve a direct impact on citizens’ norms and values.

The reader may wonder why we have treated the development of international law (and soft power diplomacy) as normative rather than instrumental strategies. This is because – at least in the field of wildlife trafficking – there are no significant mechanisms to permit the enforcement of the resultant international laws. Even if they appear on the surface to involve the development of instrumental levers, in reality their intended function is to achieve a normative shift within governments (i.e. at state level), which then cascades down to the broader population. To use Durkheimian language, the aim is

⁵See Save the Rhinos, ‘Dehorning’ from: http://www.savetherhino.org/rhino_info/issues_for_debate/de-horning

⁶The actual cost depends on several factors, but current published estimates for dehorning range from US \$620 (Kruger National Park) per animal to US\$1,000 (private land). It is estimated that it would cost around US\$5.8-8.8 million for a one-off dehorning of all the rhinos in Kruger National Park. (Save the Rhinos website).

to extend the conscious collective to other states whereas publicity campaigns directly target individuals throughout the population.

The term ‘norm diffusion’ in international relations literature is often used to describe the function performed by international organisations – including NGOs - as they spread the relevant norms to politicians and officials at state level (Finemore 1996). One can differentiate between horizontal norm diffusion, where one state deploys diplomacy to persuade another state that a particular behavior is wrong, and vertical norm diffusion, where national or international bodies aim to achieve normative shifts in the general population (or relevant sub-groups).

International Organizations and CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is the leading international legal framework for regulating the international trade in wildlife. CITES had a membership reaching 180 countries in 2013⁷. Species protected by CITES are listed in three appendices attached to the convention, with Appendix I being the most restrictive. Appendix I lists species threatened with extinction: commercial trade is prohibited, and trade in specimens of these species is permitted only in exceptional circumstances such as trophy hunting⁸.

By becoming a party to CITES, a state chooses to become a member and pledges to adopt rules to monitor, regulate or ban international trade in species under threat. While CITES is legally binding on signatory states, who are thus expected to implement the convention in their domestic legislation, the initiative to become a signatory necessarily has to come from the relevant state. Similar to other soft laws, CITES is also presented as ‘a framework to be respected by each Party’ to implement appropriate domestic laws and monitor trade. In other words, norm diffusion occurs when a state joins CITES, thereby making a normative commitment to the international community to protecting wildlife. It thus serves both declaratory and symbolic functions to the international community. However, whether CITES is effective in regulating wildlife trade is another matter, as illegal trading in wildlife has continued throughout the forty year lifespan of the convention (Ayling 2013b). Lemieux and Clarke (2009) examined the effectiveness of the CITES ban on the African ivory trade. They report that the continent’s overall elephant population increased after the elephant was moved from Appendix II to I, but that in some African countries substantial and growing numbers of elephants continued to be poached. They found that variation in the effects of the ban is partly explained by the regulations in place for domestic trade. Countries with an unregulated domestic market allowed poaching to continue, and ivory purchased in these countries by wholesalers was trafficked throughout Africa and Asia.

The efforts by signatory states to translate responsibilities under CITES into domestic legislation also seem to impact the effectiveness of the rhino horn ban. During the 1970s and 1980s the 85 per cent fall in the rhino population led to them being listed in Appendix I of CITES, which instituted a ban on international trade in rhino horns (Ayling 2013b)⁹. Rhino horns between the late 1970 and 1990s were in high demand for medicine in Asia and for jambiya dagger handles in Yemen (Ellis 2013). Success stories in banning rhino horn trade through accession to CITES – and more specifically the signatory states’ commitment to enforcing the ban through domestic legislation following membership – can be found in Japan, South Korea, and Yemen (Ellis 2013). Vietnam and China – despite both countries being member states of CITES – have yet to reduce the trade in illegal rhino horns through domestic legislation.

For example, in the 1970s, Japan was the primary consumer of rhino horn in Asia for medicinal purposes. Japan ratified CITES in 1980 and upon joining, the Ministry of Health required all manu-

⁷CITES (2013) What is CITES? See: <http://www.cites.org/eng/disc/what.php>

⁸Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.

⁹The Southern White rhino was moved to Appendix II in 1994 for the South African population and 2004 for the Swaziland population (Ayling 2013a).

facturers of rhino horn medicines to find substitutes for their products (Ellis 2013)¹⁰. In Yemen, thorough domestic legislation and the expansion of staff involved in wildlife conservation at the upgraded Environment Protection Agency also eradicated the demand for rhino horn (Ellis 2013). By contrast, in China and Vietnam, even though both countries are members of CITES as of 1981 and 1994 respectively, there was a lack of political will to follow through the responsibilities in CITES. What the above examples shows is that ratification of ‘CITES is not an end in itself, but a tool to be used to assist real conservation actions.’ (Arroyo-Quiroz et al. 2005: 15).

A separate issue to the enforcement of CITES is the politics behind the decisions by states to become signatories to the convention. From its original membership of 20 states in 1975 to the 2013 membership of 180 states, members have notionally joined voluntarily, and have had the freedom to withdraw any time. The growth in membership appears to reflect an expansion of the conscious collective in the international community in relation to wildlife protection. This analysis, however, misses the important point that some signatories to CITES are effectively coerced into membership. Arroyo-Quiroz et al. (2005: 47) explains that Mexico ‘ratified CITES only as a result of external and internal pressure’ from the US but it did not actively participate in the discussion of CITES nor implement any effective domestic legislation. It was only years later that Mexico finally recognized environmental concerns and national legislation was enacted in 2000 (Arroyo-Quiroz et al. 2005)¹¹. Singh (2008) also provides a history of how Laos was pressured into entering CITES. He argued that:

Popular representations of wildlife trade promoted by conservation organizations construct an image of regulation through CITES as a global necessity. The assumed morality of such interventions can provoke counter accusations about the immorality of impositions by Western conservationists. (Singh 2008: 19).

A further point regarding CITES is that active member states committed to conservation may ‘project an appearance of unified potency’ but are in reality ‘divided and weak’ (Singh 2008: 14). The conscious collective that CITES represents in protecting wildlife is made up of state parties that believe in different approaches to conservation: the Southern African countries want a policy for sustainable use of wildlife whereas parties in developed countries and in East Africa take a protectionist stand to the preservation of wildlife (Arroyo-Quiroz et al. 2005).

Soft Power Diplomacy

Soft power diplomacy is a concept developed by Joseph Nye in his book *Soft Power: The Means to Success in World Politics*. Nye (2004) argues that post-September 11th, soft power diplomacy is increasingly being used as opposed to the more familiar hard power diplomacy which rests on inducements or threats. He defines soft power as ‘getting others to want to do the outcome that you want’ and that it ‘rests on the ability to shape preferences of others’ (Nye 2004: 5). He draws analogies to relationships and marriages stating that power between two people is not decided by size or strength but in the ‘mysterious chemistry of attraction’ (Nye 2004: 5). In politics, Nye (2004: 5) describes this process as follows:

A country may obtain the outcomes it wants in world politics because other countries – admiring its values, emulating its example, aspiring to its level of prosperity and openness – want to follow it.

Hard and soft power diplomacies are not complete opposites but a spectrum of behaviors designed to achieve outcomes. At one end of the scale is command power and on the other end is co-optive power (Nye 2004: 8). In between exists coercion, inducement, agenda setting, and attraction, where the former being hard and the latter being soft power. Hard power uses resources such as force, sanction, payments and bribes whereas soft power uses institutions, values, culture and policies (Nye

¹⁰The use of manufactured medicines in Japan meant the use of rhino horn was easier to control, as the products were mostly registered with the government in the country of manufacture and one company dominated the manufacture of rhino horn. (Ellis 2013).

¹¹Arroyo-Quiroz et al. (2005) also makes a point that the implementation and enforcement of CITES represents a significant challenge and is not something that can be done quickly especially for a developing country like Mexico.

2004) According to the annual Monocle soft power survey, the UK was ranked second in the world in the 2013 survey. The country's soft power is reported to rest on the friendly relationships it has with the Commonwealth nations and the prominence and the high respect held for the BBC, among other factors.

The UK has also been making use of its soft power on wildlife protection¹². The UK government in February 2014 hosted an international conference on illegal wildlife trade, which brought together global leaders around the world with the aim to 'agree a high level political commitment to take urgent action to tackle illegal wildlife trade'¹³. Among the participants were icons of the 'UK brand' – including two members of the royal family. Using soft power, the conference was an attempt to send a normative message about the commitment of the UK towards tackling illegal wildlife and 'softly' urging other countries to follow.

What soft power diplomacy aims to do is to extend the conscious collective of one or more states to other states. In other words, as discussed above, soft power diplomacy has a horizontal structure, with the norm diffuser and its target being at the same organizational level. This can be contrasted with the work of international organisations where there is typically a vertical relationship between the norm diffuser and its targets in the general population. Whilst the state-to-state directness of soft power diplomacy can be a strength, problems can emerge when there are tensions between the various agendas that a country is pursuing through soft power diplomacy.

China for example has since 2000 made commitments to African countries to provide soft loans in the arenas of health, humanitarian assistance, and cultural exchanges (Cook 2009). The primary consideration is economic development and economic partnership, which does not sit comfortably with wildlife conservation agendas. Thus in Kenya, China recently signed an agreement to rebuild the railway line from Mombasa to Nairobi, with plans to extend this to Uganda, Rwanda, Burundi and South Sudan¹⁴. This would help Kenya's mining and other industries, but some conservationists are concerned that this is going to provide easier access for ivory poachers and middlemen as the railway line runs through Tsavo National Park¹⁵. China is currently the main destination country for illegally trafficked ivory¹⁶.

For some countries, China may not fit Nye's (2004) definition of an attractive model country whose values and culture they wish to adopt. However Cook (2009) has observed that for many African countries, China's economic strength is a source of soft power. China's economic engagement is seen as pragmatic and more in line with African priorities than western engagement, which often includes humanitarian programs centering on human rights which are sometimes seen as condescending and hypocritical. There are thus two competing forces on the stage of soft power diplomacy: those countries whose appeal lies in promoting the protection of Africa's wildlife and those like China whose appeal is to be found in its economic strength – and which, some might argue, benefits from the illegal wildlife trade.

Campaigns

In the last few years, high profile figures – such as President Barack Obama, Ban Ki-moon, Leonardo DiCaprio, and Jackie Chan – have taken an interest in endangered wildlife and have made public

¹²The UK ranked first in the 2012 survey. For 2013 results, see Monocle Soft Power Survey 2013: <http://monocle.com/film/Affairs/soft-power-survey-2013/>

¹³London Illegal Wildlife Conference website: <https://www.gov.uk/government/topical-events/illegal-wildlife-trade-2014/about>

¹⁴BBC News, 12 May 2014, 'China to build new East Africa railway line' <http://www.bbc.com/news/world-africa-27368877>

¹⁵African Wildlife Conservation and Kenya's Wildlife Policy Act, See: <http://blogs.cfr.org/campbell/2014/06/11/african-wildlife-conservation-and-kenyas-wildlife-policy-act/>

¹⁶BBC News, 12 April 2012, The illegal ivory trade threatening Africa's elephants. <http://www.bbc.co.uk/news/world-17675816>

statements in an attempt to raise public awareness of the issue¹⁷. Academics such as Wyatt (2011) and Ayling (2013a) also support demand reduction approaches, through awareness raising and education, as part of the solution to wildlife trafficking. While campaigns aimed at changing attitudes of consumers are starting to grow, there has been little discussion about the rationale behind these campaigns in the light of what is known about norm transmission.

Campaigns, as noted above, are often launched by international organisations or NGOs. In the context of trafficking of rhino horns, the campaigns are targeted on Asian countries, with Vietnam (and to some extent China) being the main consumer of rhino horns. Rhino horns are popular along the Vietnamese ‘new rich’ (Ellis 2013). Rhino horn symbolizes status amongst the wealthy elite, and is used in business deals and social gatherings, where it is ground to a powder, mixed with water and drunk as a social drink (Ellis 2013; Ayling 2013a). It is also being sought as a cure for cancer used in tandem with chemotherapy, as the rhino horn is believed to minimize the harmful effects of the other treatments. There is no scientific evidence for any medicinal value of rhino horn, which is composed of keratin, just like human hair and fingernails (Ayling 2013a)¹⁸.

Against this background, there are broadly two types of campaigns aimed at tackling demand. One approach (Example 1) is to highlight the cruelty of rhino horn poaching and emphasizes how close rhinos are to extinction. Jackie Chan in a WildAid¹⁹ campaign video calls for the protection of the ‘beautiful creature’ from poaching while demonstrating the cruelty of poaching through his martial arts skills. The other approach is to challenge the false beliefs that can underpin consumer demand, exemplified by traditional Chinese medicine’s assumptions about the curative properties of rhino horns.

Example 1

Jackie Chan: <https://www.youtube.com/watch?v=yccID-2jlfM>

Example 2

Horns as finger nails: <http://wwf.panda.org/?208289/Ad-campaign-aims-to-reduce-Vietnamese-demand-for-rhino-horn>

What do these campaigns tell us about the current approaches to norm diffusion? Acharya (2004: 239) states that constructivist scholarship on norms tends to focus on moral transformation whereby ‘good’ global norms – in this case care for endangered species – prevail over ‘bad’ local beliefs and practices; but he argues that ‘many local beliefs are themselves part of a legitimate order which conditions the acceptance of foreign norms.’ This perspective which takes a step back from focusing on how to change people’s views and rather looks at whose views the campaigns are trying to impact. Campaigns carry the inherent risk of audience resistance, as there is always a danger that the target audience may construe the message as an unjustified imposition on their own standards.

Hirata (2007) uses the example of Japan’s persistent support for whaling, explaining that the Japanese public perceives anti-whaling campaigns as a reflection of cultural imperialism. To the Japanese, it is hypocritical that Westerners consider it morally wrong to kill some mammals such as whales but acceptable to kill others such as sheep or pigs. Most Japanese continue to believe that Japan as a whole has had a distinctive whale-eating culture, regarding whales as fish rather than mammals and thus not deserving of special treatment, and that Japanese have the right to hunt and eat whale as long as stocks are maintained at a sustainable level (Hirata 2007). Naylor (2004: 289), referring to the ivory campaign, also argues that the photos of decapitated elephants produced a sense of revulsion

¹⁷See for example: ‘Ban Ki-moon to warn UN security council of dangers of wildlife trafficking’ *The Guardian* (28 May 2013). <http://www.theguardian.com/world/2013/may/28/un-ban-kimoon-wildlife-trafficking-central-africa>

Jackie Chan: Chinese attitudes to illegal wildlife products are changing:

<http://www.theguardian.com/environment/2014/feb/13/jackie-chan-chinese-attitudes-illegal-wildlife-products-change>

¹⁸Most traditional Chinese medicine countries in Asia, including China, Japan, Taiwan, and South Korea, but excluding Vietnam, have removed rhino horn from their traditional medicine pharmacopoeias (Ayling 2013a).

¹⁹WildAid is an NGO with a mission to end the illegal wildlife trade by reducing demand through public awareness campaigns and providing comprehensive marine protection. WildAid focuses on reducing the demand for these products, with the strong and simple message: *when the buying stops, the killing can too*. See: <http://wildaid.org/media>

against ivory in the west but had no real effect in the east where ivory has a long association with art and culture, and the ‘thrill of possessing a forbidden object’.

Wildlife campaigns premised on the intrinsic value of protecting rhinos may end up simply preaching to the converted. Campaigns that fail to address cultural values within target audiences seem likely to fail. For example, Yu (2010) argues that Confucian philosophy which dominates in China construes wildlife as a lower life form that can be contained and consumed, and treated as a resource in a utilitarian way. Furthermore, attempts to correct misconceptions as in the poster about keratin described above, may seem to Western sensibilities both witty and logical; but they fail to engage with the belief in traditional oriental medicine that the spirit of the animal is embodied in its flesh and bones; to those who hold these beliefs, the absence of scientific proof of medicinal qualities is irrelevant.

Durkheim in explaining the notion of the conscious collective stated that ‘we must not say that an action shocks the conscious collective because it is criminal, but rather it is criminal because it shocks the conscious collective’ (Durkheim 1983 in Giddens 1972:123-124). This brings us to questions about the factors that can shape and expand the conscious collective? Acharya (2004: 239) argues norm diffusion requires ‘norm localization’ where ‘local agents reconstruct foreign norms to ensure the norm fits with the agents’ cognitive priors and identities’²⁰. He argues that norm localization may be a precondition for the adoption of external norms, and that this process of localization needs to demonstrate that the norms in question have ‘a potential to contribute to the legitimacy and efficacy of existing institutions without undermining them significantly’. He also argues that there must be ‘willing and credible local actors....these actors should not be seen as “stooges” of outside forces’ (Acharya 2004: 251).

Applying the above framework, it is not a surprise that the Japanese whaling campaigns to date have been unsuccessful. Greenpeace Japan adopted the anti-whaling campaign used by International Greenpeace headquarters and this did not fit well with the domestic value system, and was not able to create a social movement (Hirata 2007). Other Japanese NGOs did not join in the movement because they feared that involvement in the anti-whaling cause would damage their reputation, alienate them from the public, and weaken their efforts to raise funds and increase membership (Hirata 2007). Jackie Chan, as in the example above, in this sense may be a suitable candidate for delivering a message to the ‘Asian’ market. However, his campaign is heavily endorsed by non-Asian international organizations and NGOs, whose logos are prominent on the campaign materials. It would be interesting to find out how the campaign is received locally. Lastly, Yu (2010) proposes that instead of Confucian philosophy, Daoist philosophy may be useful in the localization process. Daoist philosophy is non-hierarchical in its conceptualization of differences between species, its inclusive and holistic view of all forms of existence calls for harmony among man, nature, and wildlife (Yu 2010: 123).

Hybrid Policies: Incentivizing Local Communities and Community-based Conservation

In practice, some strategies for regulating undesirable behavior include both instrumental and normative elements. There are two ways in which this may happen. First, normative pressures may be applied at one level – for example by one government upon another, using soft power diplomacy – and these may result in the latter passing and enforcing tough legislation. In other words, the strategy of the government exercising soft power operates both at a normative and at an instrumental level, with the normative levers being applied at the political level, resulting in state deployment of instrumental strategies.

The second way in which instrumental and normative strategies may be combined is when levers applied to a given group have both normative and instrumental dimensions. The clearest example in the case of wild life trafficking is in strategies targeting the communities within which poaching takes place. Twenty or so years ago, poachers would be drawn mainly from local communities living on or

²⁰Acharya (2004) uses the example of ASEAN’s response to security norms of the post-Cold War era in explaining the norm localization process.

near game reserves. The aim of poaching (or hunting) was to protect crops or to market horn or ivory (Warchol 2004). Back then, the level of organization of poachers was described as ‘non-existent to, at best, a loosely associated network of friends or fellow collectors’ (Warchol 2004: 65). Participants would almost certainly have resisted the label of ‘poacher’, and might well have been proud of their economically valuable skills.

Today, the profile of poachers is polarized between locals and organized crime syndicates (Kalron 2013). While poor villagers from rural areas are still engaged in poaching, there is growing evidence that organized criminal groups such as Groenewald gang and the ChumlongLemtongthai group are involved (Ayling 2013a; Killing for Profit N.D.²¹). Often however, organized crime groups are unable to operate without the support of people from local communities.

Promising hybrid policies include those that target local communities in wildlife areas, simultaneously offering tangible benefits from involvement in conservation and promoting the ethical arguments for conservation. This is often referred to as community-based conservation (CBC), operating under the slogan ‘protection by, for and with the local communities’ (Save the Rhinos N.D.²²). CBC projects include eco-tourism, production and selling of local craft-work, hunting and collecting traditional medicine products, and running environmental educational programs. The goal is ‘to integrate the communities into the projects for profitable cohabitation for all’ (Save the Rhinos N.D.)

CBC emerged against a history of exclusion of local communities from the conservation agenda (Turner 2004; Sebele 2010). Before CBC, the conservation model was based on ‘a romantic European understanding of nature as fragile and pristine’ (Turner 2004: 163) in which human activity was viewed as intrinsically harmful to nature. This led to the creation of protected areas from which local people were excluded. The concept of community engagement started to emerge in developing countries in the 1950s and 60s when developing countries were being decolonized (Selebe 2010) – an added impetus being the practical impossibility of excluding communities from protected areas through fences, fines, and coercion (Turner 2004). It was considered that the route to sustainable development was to remove the stigma of charity by involving local people in decision making (Selebe 2004).

Sebele (2010) evaluated the Khama Rhino Sanctuary Trust; a CBC in Botswana established in 1992 and aimed at saving rhinos and bringing economic benefits for locals through tourism. She shows that the Sanctuary offered employment for the locals such as through the hiring of cleaners, drivers, and guides, but argued that insufficient profit had been generated to permit reinvestment in projects benefiting the community at large. Turner (2004) in examining the CBC of Kruger National Park in South Africa, argues that while tourism has substantial promise, relying on conservation-based tourism for development is a risky business because many community-based projects are not well positioned to compete against state-supported protected areas or private ventures²³. This is because the communities mostly targeted for CBC projects tend to be those which have been disadvantaged by prior conservation initiatives and by colonial legacies which make it more difficult for community actors to engage with their partners on an equal basis (Turner 2004).

Selebe (2010) also identifies the more critical problem that it is very hard, in practice, to generate a sense of broad-based community ownership of projects. Focus group research with community members in the Sanctuary project showed that they saw control as vested in a single elite family, with heavy reliance on foreign donors (Sebele 2010). Sebele found that local people were not involved in decision making, and did not directly benefit from the venture. Turner (2004) also identifies the lack of substantial community involvement. He argues that while CBC can take various forms, the majority of projects have a top-down approach, which starts with the government or private actors deciding

²¹Killing for Profit website: <http://killingforprofit.com>

²²Save the Rhinos. See: http://www.savetherhino.org/our_work/what_we_do/community_conservation

²³He adds that even though the ethos of CBC is to provide equal opportunities for locals, tourism in southern Africa to be radicalized where white guides are assisted by unskilled black labourers (Turner 2004).

to involve the local communities near the protected areas, and offering brief consultations with local communities rather than substantial involvement in decision making.

While Sebele (2010) remains hopeful that with more interaction between the locals and those who manage the Sanctuary, CBC can provide for the conservation of natural resources and increase local benefits, Turner (2004) provides a critique of the rationale for CBC from a historical perspective. He argues that CBC projects have focused too much on the material benefit that it promises to bring (although evidence that this occurs is patchy) and have largely ignored the history of many African nations, and questions whether financial benefit is what the local community really want:

CBNRM²⁴ emerged from a conservation history deeply intertwined with injustice, exclusion and dislocation, and it is far from clear that a largely materialist strategy can respond adequately to this legacy. Although the Makuleke people hope that the conservation future of the Makuleke Region will improve their economic condition, for example, it's not the only basis on which they judge success. They see regaining title to their ancestral home as an immense symbolic achievement, the value of which is largely independent of subsequent commercial success or failure.... Ultimately, these factors, rather than the material benefits flowing from economic development may prove to be the determinants of CBNRM 'success' (Turner 2004: 181-182).

Those who are implementing conservation programs may see poachers as motivated by need (to prevent wild animals from disrupting their farming) or greed (to profit from the sale of wildlife), and may see incentivizing communities to engage in conservation through their integration into the tourism trade as the win-win solution. The caution here is that we need to make sure – through communication with the communities - that the incentives that are offered are consistent with their basic values and outlook.

Conclusion

This paper has reviewed a range of approaches to the reduction of wildlife poaching and trafficking, focusing – but not exclusively – on the poaching of rhinos and the trafficking of rhino horn. We have argued that instrumental strategies to do with arrest, prosecution and punishment of those involved in poaching and trafficking will never be more than one part of the solution to the problem. We suggest that normative strategies are needed to support instrumental strategies. These need to target both the consumers of wild-life products – with the intention of reducing demand – and those who are involved in parts of the supply process.

To be effective, demand-reduction strategies will probably involve soft power diplomacy to secure the support of politicians in consumer countries, coupled with campaigns that direct reach consumers directly. It seems likely that soft power diplomacy will need to encourage new signatories to CITES to take their obligations seriously, and to enact local legislation. It is hard to see how supply reduction strategies will work effectively without well thought-through strategies involving deterrence and situational crime prevention. However, these also need to be combined with strategies that include a normative dimension. The clearest example of this is to be found in community-based conservation programmes that offer local communities both an economic and an ethical stake in the protection of wildlife.

Acknowledgements: This work was supported by the European Commission through the Seventh Framework Programme for Research and Development (grant agreement number 290653) under the FIDUCIA research project. The authors would like to thank Dr Jessica Jacobson for her helpful comments and suggestions.

References

- Acharya, A. (2004). How ideas spread: where norms matter? Norm localization and institutional change, *International Organization*, 58/2: 239-275.
- Adams, L. (2012). 'Shoot to Kill?', Save the Rhinos. Available from: http://www.savetherhino.org/rhino_info/thorny_issues/shoot_to_kill

²⁴CBNRM stands for Community-Based Natural Resource Management.

- Alacs, E. & Georges, A. (2008). Wildlife across our borders: a review of the illegal trade in Australia. *Australian Journal of Forensic Sciences*, 40/2: 147-160.
- Alacs, E.A., Georges, A., FitzSimmons, N.N. & Robertson, J. (2010). DNA detective: a review of molecular approaches to wildlife forensics. *Forensic Science, Medicine, and Pathology*, 6: 180-194.
- Ayling, J. (2013a). What sustains wildlife crime? Rhino horn trading and the resilience of criminal networks. *Journal of International Wildlife Law & Policy*, 16/1: 57-80.
- Ayling, J. (2013b). Harnessing third parties for transnational environmental crime prevention. *Transnational Environmental Law*, 2: 339-362.
- Arroyo-Quiroz, I., Perez-Gil, R. & Leader-Williams, N. (2005). Developing countries and the implementation of CITES: the Mexican experience. *Journal of International Wildlife Law & Policy*, 8/1: 13-49.
- Barber-Meyer, S.M. (2010). Dealing with the clandestine nature of wildlife-trade market surveys. *Conservation Biology*, 24/4: 918-923.
- Blundell, A.G. & Mascia, M.B. (2005). Discrepancies in reported levels of international wildlife trade. *Conservation Biology*, 2020-2025.
- Cao, A. & Wyatt, T. (2013). A green criminological exploration of illegal wildlife trade in Vietnam. *Asian Criminology*, 8: 129-142.
- Cook, J.G. (2009). China's Soft Power in Africa. *Chinese Soft Power and Its Implications for the United States*. Centre for Strategic & International Studies. Online publication available from: <http://csis.org/publication/chinese-soft-power-and-its-implications-united-states>
- Durkheim, E. (1915). *The elementary forms of the religious life*. Available from: <http://www.gutenberg.org/files/41360/41360-h/41360-h.htm>
- Durkheim, E. (1893). *The Division of Labour in Society*, in A. Giddens (1972) *Emile Durkheim Selected Writings*. Cambridge: Cambridge University Press.
- Eaton, M.J., Meyers, G.L., Kolokotronis, S.-O., Leslie, M.S., Martin, A.P., Amato, G. (2010). Bar-coding bushmeat: molecular identification of Central African and South American harvested vertebrates. *Conservation Genetics*, 11: 1389-1404.
- Ellis, K. (2013). Tackling the demand for rhino horn. *Save the Rhinos*. Available from: http://www.savetherhino.org/rhino_info/thorny_issues/tackling_the_demand_for_rhino_horn
- Fa, J.E., Farfán, M.A., Marquez, A.L., Duarte, J., Nachoney, J., Hall, A., Dupain, J., Seymour, S., Johnson, P.J., MacDonald, D.W. & Vargas, M. (2013). Mapping hotspots of threatened species traded in bushmeat markets in the Cross-Sanaga Rivers region. *Conservation Biology*, 28/1: 224-233.
- Finnemore, M. (1996). *National Interests in International Society*, Ithaca and London: Cornell University Press.
- Ferries, G.M., Farmer, K.H., Kuhar, C.W., Grand, A.P., Sherman, J., & Bettinger, T.L. (2014). The social, economic, and environmental contributions of Pan African Sanctuary Alliance primate sanctuaries in Africa. *Biodiversity and Conservation*, 23: 187-201.
- Fragoso, F. & Ferriss, S. (2008). Monitoring international wildlife trade with coded species data: response to Gerson et al. *Conservation Biology*, 22/6: 1648-1650.
- Gerson, H., Cudmore, B., Mandrak, N.E., Coote, L.D., Farr, K., & Baillargeon, G. (2008). Monitoring international wildlife trade with coded species data. *Conservation Biology*, 22/1: 4-7.
- Hirata, K. (2005). Why Japan Support Whaling. *Journal of International Wildlife Law & Policy*, 8/2-3: 129-149.
- Kalron, N. (2013). Neo-conservation. *African Security Review*, 22/3: 160-166.
- Kagande, S.M. & Musarurwa, L.K. (2014). Conserving the African rhinoceros. *Biodiversity and Conservation*, 23: 497-502.
- Lemieux, A.D. & Clarke, R.V. (2009). The international ban on ivory sales and its effects on the elephant poaching in Africa. *British Journal of Criminology*, 49: 451-471.
- Lewis, M.G. (2009). CITES and rural livelihoods: the role of CITES in making wildlife conservation and poverty reduction mutually supportive. *Journal of International Wildlife Law & Policy*, 12/4: 248-275.
- MacCoun, R. & Reuter, P. (2001). *Drug war heresies: Learning from other vices, times, and places*. Cambridge University Press.
- Naylor, R.T. (2004). The underworld of ivory. *Crime Law & Social Change*, 42: 261-295.
- Nye, J. (2004). *Soft Power: The Means to Success in World Politics*, New York Public Affairs.
- Percipalle, M., Giardina, G., Lipari, L., Piraino, C., Macrí, D., & Ferrantelli, V. (2011). Salmonella infection in illegally imported Spur-Thighed tortoises (*Testudo graeca*). *Zoonoses and Public Health*, 58: 262-269.
- Phelps, J., Carrasco, L.R., & Webb, E.L. (2013). 'A framework for assessing supply-side wildlife conservation. *Conservation Biology*, 28: 244-257.
- Pires, S.F. & Moreto, W.D. (2011). Preventing wildlife crimes: solutions that can overcome the 'tragedy of the commons. *European Journal on Criminal Policy Research*, 17: 101-123.
- Reeve, R. (2006). Wildlife trade, sanctions and compliance: lessons from the CITES regime. *International Affairs*, 82/5: 881-897.
- Rosen, G.E. & Smith, K.F. (2010). Summarizing the evidence on the international trade in illegal wildlife. *Ecohealth*, 7/24: 24-32.
- Sebele, L.S. (2010). Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana. *Tourism Management*, 31: 136-146.

- Seidensticker, J. (2010). Saving wild tigers: a case study in biodiversity loss and challenges to be met for recovery beyond 2010. *Interactive Zoology*, 5: 285-299.
- Singh, S. (2008). Contesting moralities: the politics of wildlife trade in Laos. *Journal of Political Ecology*, 15: 1-20.
- Schneider, J.L. (2008). Reducing the illicit trade in endangered wildlife: the market reduction approach. *Journal of Contemporary Criminal Justice*, 24/3: 274-295.
- South, N. & Wyatt, T. (2011). Comparing illicit trades in wildlife and drugs: an exploratory study. *Deviant Behavior*, 32/6: 538-561.
- Stoett, P. (2002). The international regulation of trade in wildlife: institutional and normative considerations. *International Environment Agreements: Politics, Law and Economics*, 2: 195-210.
- Tisdell, C., Nantha, H.S. & Wilson, C. (2010). Biodiversity conservation and public support for sustainable wildlife harvesting: a case study. *International Journal of Biodiversity Science & Management*, 3/3: 129-144.
- Turner, R.L. (2004). Communities, wildlife conservation, and tourism-based development: can community-based nature tourism live up to its promise? *Journal of International Wildlife Law & Policy*, 7/3-4: 161-182.
- Von Lampe, K. (2011). The application of the framework of situational crime prevention to 'organised crime'. *Criminology and Criminal Justice*, 11/2: 145-163.
- Wasser, S.K., Shedlock, A.M., Comstock, K., Ostrander, E.A., Mutayoba, B., and Stephens, M. (2004). Assigning African elephant DNA to geographic region of origin: applications to the ivory trade. *PNAS*, 101/41: 14847-14852.
- Wasser, S.K., Clark, W.J., Drori, O., Kisamo, E.S., Mailand, C., Mutayoba, B. & Stephens, M. (2008). Combating the illegal trade in African elephant ivory with DNA forensics. *Conservation Biology*, 22/4: 1065-1071.
- Warchol, G.L. (2007). The transnational illegal wildlife trade. *Criminal Justice Studies: A Critical Journal of Crime, Law and Society*, 17/1: 57-73.
- Wyatt, T. (2011). The illegal trade raptors in the Russian Federation. *Contemporary Justice Review: Issues in Criminal, Social, and Restorative Justice*, 14/2: 103-123.
- Wyatt, T. (2009). Exploring the organization of Russia Far East's illegal wildlife trade: two case studies of the illegal fur and illegal falcon trades. *Global Crime*, 10/1-2: 144-154.
- Yi-Ming, L., Zenxiang, G., Xinhai, L., Sung, W. & Niemela, J. (2000). Illegal wildlife trade in the Himalayan region of China. *Biodiversity and Conservation*, 9: 901-918.
- Yu, X. (2010). Biodiversity conservation in China: barriers and future actions. *International Journal of Environmental Studies*, 67/2: 117-126.