NATURE CRIME

HOW WE'RE GETTING CONSERVATION WRONG

ROSALEEN DUFFY

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LIST OF ABBREVIATIONS

ACAP  Active Conservation Awareness Programme

ADFL  Alliance of Democratic Forces for the Liberation of Congo

ANGAP  Association Nationale pour la Gestion des Aires Protégées

ARRC  African Rainforest and River Conservation

AWF  African Wildlife Foundation

CAMPFIRE  Communal Areas Management Programme for Indigenous Resources

CBD  Convention on Biological Diversity

CBNRM  Community-Based Natural Resource Management

CI  Conservation International

CITES  Convention on the International Trade in Endangered Species

DEFRA  Department for Environment, Food and Rural Affairs

DRC  Democratic Republic of Congo

DSWF  David Shepherd Wildlife Foundation

EIA  Environmental Investigation Agency

GLTP  Great Limpopo Transfrontier Park

HSUS  Humane Society of the US

ICCN  Institut Congolais pour la Conservation de la Nature/Congolese Institute for Nature Conservation

ICDP  Integrated Conservation and Development Project

IDPs  Internally Displaced People

IFAW  International Fund for Animal Welfare

ITRG  Ivory Trade Review Group
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>IUCN</td>
<td>International Union for the Conservation of Nature</td>
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<td>IUCN-SSC</td>
<td>IUCN Species Survival Commission</td>
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<td>KWS</td>
<td>Kenya Wildlife Services</td>
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<td>MRAG</td>
<td>Marine Resources Assessment Group</td>
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<tr>
<td>NGO</td>
<td>non-governmental organization</td>
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<td>NTCA</td>
<td>National Tiger Conservation Authority</td>
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<td>NWCU</td>
<td>National Wildlife Crime Unit</td>
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<tr>
<td>PAC</td>
<td>Problem Animal Control</td>
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<td>PAW</td>
<td>Partnership for Action Against Wildlife Crime</td>
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<td>PHASA</td>
<td>Professional Hunters Association of South Africa</td>
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<td>QMM</td>
<td>Qt-Fer Minerals Madagascar</td>
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<td>RPF</td>
<td>Rwandan Patriotic Front</td>
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<td>RSPB</td>
<td>Royal Society for the Protection of Birds</td>
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<td>RSPCA</td>
<td>Royal Society for the Prevention of Cruelty to Animals</td>
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<td>SADF</td>
<td>South African Defence Force</td>
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<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
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<tr>
<td>TCM</td>
<td>Traditional Chinese Medicine</td>
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<tr>
<td>TFCAs</td>
<td>Transfrontier Conservation Areas</td>
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<tr>
<td>TNC</td>
<td>The Nature Conservancy</td>
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<tr>
<td>TRAFFIC</td>
<td>Trade Records and Analysis of Flora and Fauna in Commerce</td>
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<tr>
<td>UNITA</td>
<td>União Nacional para a Independência Total de Angola/ The National Union for the Total Independence of Angola</td>
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<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WCS</td>
<td>Wildlife Conservation Society</td>
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<td>WWF</td>
<td>World Wide Fund for Nature</td>
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INTRODUCTION

My home is vanishing. The forests I once ruled are being cut down, and my hunting grounds destroyed. Will you remember me? Will you show your grandchildren pictures of the beautiful cats that used to share your planet? Will they believe that such magnificent creatures were allowed to die out? All of us, finally and forever. It's not too late. But soon it will be. Don't let me go.

This World Wide Fund for Nature fundraising leaflet for tiger conservation was circulated in November 2009. It neatly communicates the problem: wildlife is under threat and we need to act urgently. Conservation non-governmental organizations (NGOs) like World Wide Fund for Nature (WWF) and Conservation International tell us that the loss of wildlife is one of the most important challenges facing our planet, that we are facing an extinction crisis to rival the end of the dinosaurs. We fear that some of the world's most iconic species will disappear
from the earth forever, that future generations will not be able
to see mountain gorillas, pandas, tigers or elephants in the wild,
if at all.

The International Union for the Conservation of Nature (IUCN)'s Red List tells us that 360 vertebrates, 373 invertebrates
and 110 plants have become extinct, or extinct in the wild, since
AD 1500.¹ Fears about species loss have been stoked by high-profile
public figures, such as Paul Ehrlich and Edward O. Wilson, who
argue that the loss of tropical forests alone is eliminating anything
from 4,000 to 40,000 species per year.² Some scientists have even
argued that we are living through another great extinction crisis –
the end of the dinosaurs was the fifth extinction, but this sixth
extinction is the result of human interference in the natural world.³
This raises the question of why extinctions matter. In many writings
on conservation it is simply assumed that extinction is a ‘bad
thing’ that needs to be tackled urgently. Writers such as Norman
Myers and Edward O. Wilson point to the potentially harmful
impacts on ecosystems and on human life, arguing that extinctions
matter because they are indicators of the wider health of the planet,
which sustains human life. If too many species go extinct then
we risk ecosystem collapses. Norman Myers puts it bluntly: ‘we are
dealing with a matter of exceptional importance and unique
urgency . . . There is a need to address the extinction of populations,
which are the main providers of ecosystem functions and services.’⁴

Concerns about species and habitat loss have motivated govern-
ments, individuals and private companies to support wildlife
conservation around the world, and, judging by the amount of
money raised and effort expended, conservation is big business.
Many of us are loyal members of conservation organizations: we
donate, adopt or sponsor animals, and support their campaigns.
For example, WWF-UK has 168,417 members, and 250 major
donors.⁵ WWF-US has 1.2 million members in the United States
and nearly five million supporters worldwide.⁶ It is difficult
to establish precisely how much money is spent each year on
conservation, but the four biggest NGOs – Conservation
International, the Wildlife Conservation Society, WWF and the
Nature Conservancy (TNC) – invested a total of US$490 million
in conservation in the developing world in 2002, with a similar
amount being spent by other, smaller organizations.⁷ TNC claims
to be the world’s largest conservation organization with net assets
worth US$4.3 billion, and, like other big conservation NGOs, it
has links with a growing list of corporate partners, including
AT&T, Hewlett Packard, Avon, Oracle, Cisco, BP and General
Motors.⁸ Save the Tiger Fund has benefited from one of the largest
corporate donations in history: ExonMobil provides US$1
million annually, and has donated more than US$13 million in
total for tiger-range countries since 1992.⁹ The role of NGOs will
be discussed in more detail in Chapter 2, but these examples give
some indication of their growing power: through funding for
specific forms of conservation they have the ability to project their
vision across the world.

Considerable effort, funding and attention has therefore been
lavished on some species and the areas they live in. Tigers,
gorillas, elephants, pandas and rhinos spring to mind, although
there are many more species that cause concern to conservation-
ists around the world. We are accustomed to bad news stories in
conservation, but there have also been some important successes.
Some species have been brought back from the brink of extinction
through careful management and investment. For example,
the number of white rhinos has increased from only 50–200 at
the start of the twentieth century to about 17,500 today.¹⁰ In the
UK the Royal Society for the Protection of Birds (RSPB) has
successfully reintroduced sea eagles to Scotland, where they
became extinct in 1916; a viable population has now been established, and in 2009 there were forty-three breeding pairs that successfully reared thirty-six chicks.\textsuperscript{11} The Durrell Wildlife Conservation Trust has also succeeded in saving the Mauritius kestrel from extinction, and its captive breeding programme for the Mauritius pink pigeon has enabled twenty pigeons to be returned to Mauritius, as a result of which the species is now listed as ‘endangered’ rather than ‘critically endangered’ by the IUCN.\textsuperscript{12} These are important achievements in conservation, and they should not be overlooked as we rush to declare an extinction crisis. These successes indicate that it is possible for us to save individual species, even when the outlook seems bleak.

However, it is foolish to assume that these success stories mean that conservationists do not have major challenges on their hands. In 1970 there were approximately 65,000 black rhinos in the wild in Africa, but by 1992 there were just 2,300, a staggering 96 per cent decrease.\textsuperscript{13} In the late 1980s elephant populations crashed from 1.3 million to just 600,000 due to poaching for ivory. WWF estimates that elephant range declined from 7.3 million square kilometres in 1979 to 5.9 million in 1987 and to 5.7 million by 1998; of the remaining range area available for wild elephants today, almost 80 per cent falls outside protected areas.\textsuperscript{14} And IUCN figures show that tigers have lost a massive 93 per cent of their historical range, and that there are just 5,000 left in the wild.\textsuperscript{15} Clearly some species are facing serious threats to their long-term survival.

Since habitat is crucial in sustaining animal populations, conservation efforts are generally focused around the development and management of protected areas – that is, national parks and reserves, where wildlife can thrive, undisturbed by human activity. This is not a new idea; some of the world’s most famous parks, such as Yellowstone and Yosemite in the United States of America, were established in the late nineteenth century. This model of the people-free wilderness was exported by European colonial administrations, which set up new networks of protected areas in Africa and Asia in the nineteenth and twentieth centuries. However, the process of creating new protected areas did not end with the dying days of colonialism. The number of protected areas around the world increased substantially between 1985 and 1995, and, while this spectacular growth has waned in the last few years, new protected areas are still springing up all over the world.\textsuperscript{16} For the conservation movement this is a cause for celebration, because it means that more and more areas and species are sheltered from the harmful effects of human development.

However, as I shall discuss in this book, these ‘successes’ increasingly come at a cost. The development of two new protected areas, in the Chagos Archipelago and Southern Madagascar, illustrate some of the problems involved.

In 2010 the UK Foreign and Commonwealth Office began a consultation process for developing the world’s largest marine protected area in Chagos Archipelago, in the Indian Ocean. The area is known for its pristine coral reefs, and the scheme is supported by a powerful network of conservation organizations including Kew Gardens, London Zoo, the RSPB, the Royal Society and the Marine Conservation Society. However, the islands’ picture-perfect image hides a darker history. Their residents were forcibly evicted in the late 1960s by the British government, to make way for the development of a US military base on Diego Garcia, the largest of the islands. Since then, more than 4,000 evictees have fought a legal battle to return to their homeland, taking their case through the British courts and finally to the European Court of Human Rights. They are concerned that the new marine conservation area is designed to ‘greenwash’ the existing military base and cement the islanders’ exile; even
if they were allowed to return home, the proposed ban on fishing would mean that they could not use local resources for subsistence or income generation. So the Chagossians would continue to be excluded by the creation of the protected area, while the US military would not. IUCN has endorsed the plan, despite criticisms from its own legal advisors that it breaches the rights of evicted communities. The Chagos case draws our attention to the darker side of conservation: in particular, the power of international NGOs and the human costs of their ‘good intentions’ for wildlife.

Chagos is not an isolated problem. Conservation International, WWF and Wildlife Conservation Society have all been active in pushing forward the development of new protected areas in Madagascar since 2004 (discussed in chapter two). But this process has also been fraught with concerns about the displacement and marginalization of local communities. The case of a new ilmenite (titanium dioxide) mine by Qit-Fer Minerals Madagascar (QMM) in Fort Dauphin in southern Madagascar illustrates the major themes of this book: the importance of international conservation NGOs, the development of powerful new alliances with the private sector, the ways local communities are alienated by conservation schemes, and how conservation rules defending wildlife brand some people as criminals.

QMM is 80 per cent owned by the international mining corporation Rio Tinto and 20 per cent owned by the government of Madagascar. The Malagasy government is funding the construction of a port for the mine through its Integrated Growth Poles Project; ultimately funded by the World Bank, the project is intended to help provide the business environment to stimulate and lead economic growth in three selected regions of the country. Rio Tinto claims that the mine project will deliver ‘broader economic development in the country while providing conservation opportunities’. The company has zoned areas around the mine which will become part of the national network of protected areas in Madagascar. It also set up an ecotourism project which has been running since 2000 to allow local communities to benefit from the conservation initiatives established by Rio Tinto. QMM has worked closely with the Royal Botanical Gardens at Kew, Conservation International, Missouri Botanical Gardens, Earthwatch and the Smithsonian Institute to mitigate the social and environmental impacts of such a massive mining operation. On the surface this looks like a good way to ‘offset’ the environmental damage caused by mining, and appears to provide genuine social and economic benefits to local communities.

But the mine has been heavily criticized by Friends of the Earth, which stated that the project threatens unique forest resources and would leave local people struggling to survive, despite promises of jobs and compensation. Local communities have complained that the compensation payments are not sufficient, since land prices have risen in that area, and that promises of employment have not materialized. This reveals how well-intentioned conservation schemes can end up alienating local communities who have to live with the everyday costs of the new initiatives. Conservation does not constitute a neat win-win scenario, and often this is the result of the failure to recognize the complex politics involved in developing new initiatives.

This book draws on over fifteen years of research on conservation, during which time I have carried out numerous interviews with conservation professionals all over the world. I became accustomed to the puzzled look when they realised that my academic background was politics and international relations, not biology or environmental management. When I have ventured questions about the conflicts, arguments, divisions and wrangles over how to conserve a specific species, I have often been met
with a dismissive comment: that it is all politics, it gets in the way of the science, of the real practice. Conservation professionals seem to find the ‘politics’ of it all rather unimportant and exhausting. My rejoinder is that politics is what matters: the inability to negotiate these conflicts and work with people on the ground is where conservation often sows the seeds of its own doom. The failure to recognize that their apparently neutral and science-based vision of conservation is a culturally embedded one, and that they are ‘power actors’ in the international system, lies at the heart of the problem.

While I have had a lifelong interest in wildlife and conservation, my formal research career began in Zimbabwe in 1994 where I completed fieldwork for my PhD. Since then I have been fortunate to research and experience conservation in action in Mexico, Belize, Madagascar, South Africa, Ethiopia, Thailand and Botswana. This book utilizes that ongoing fieldwork, which includes approximately 300 interviews with conservation policy makers, NGO representatives, scientists, journalists and government officials, as well as discussions with local communities and my own personal observations and experiences. Fieldwork material was supplemented with analysis of documents produced by NGOs, the World Bank, national governments and the wider writings of fellow academics committed to understanding the harmful effects of good intentions. The photographs in this book were all taken by me; they serve as illustrations and an attempt to place conservation in its social context. This presented a real ethical dilemma; I have tried to ensure that people are not made ‘invisible’ in the photographs, but equally have had to make sure that individuals, businesses and organizations were not identifiable, unless the photograph was taken as part of a public event.

This book examines the headline-grabbing stories of conservation, like ivory poaching, the gorilla murders of 2007 and the tiger bone trade, to work out how conservation can be made more effective. My intention is to improve our understanding of conservation by delving behind the assumptions about issues like poaching and the trade in wildlife. We often assume that ‘people’ are the enemies of wildlife conservation: they are the illegal traders, the poachers, the hunters and the habitat destroyers. Similarly we believe that individuals in conservation organizations and rangers in national parks are wildlife saviours who protect the planet’s precious animals and environments from their enemies. However, these images are oversimplifications. This book will question the idea that there are wildlife enemies and wildlife saviours and explore how the good intentions of conservation end up alienating local communities. This is vital because failing to tackle such injustices damages wildlife conservation in the long run. This means we have to confront a series of challenging questions: why do global conservation policies not always achieve the desired effect? What are the impacts of protected areas on local communities? How important are international conservation NGOs? Why are there sharp divisions over the best ways to achieve conservation? Why is it that tourism has failed to be the magic bullet for wildlife conservation? Answering these questions requires us to see conservation in its global context: the bigger picture shapes the successes and failures of conservation on the ground.

One of the first issues tackled by this book is what is really driving the wildlife trade, and why it is so hard to control. The wildlife trade is one of the most valuable trades in the world. TRAFFIC-International estimates that in the early 1990s the value of legally traded wildlife products was US$160 billion per annum, legal wood exports were worth US$132 billion, and legal seafood exports were valued at US$50 billion. The value of the illegal trade in wildlife products is harder to estimate, but is likely to be worth between US$10 and US$20 billion per year, second only to the
international drugs trade in the ranks of illegal exchange.\textsuperscript{24} This trade has a massive impact on wildlife all around the world.

All sorts of different species are traded, not just ivory, rhino horn and tiger parts. All of us are consumers of wildlife in one way or another. We eat wildlife, we wear it as clothing and accessories, we consume it as medicine and we buy ornaments and souvenirs made from it. We might eat shellfish and caviar, wear shoes made from crocodile and snakeskin or buy ornaments made from tropical hardwoods. Our consumption habits also impact on wildlife because the goods we demand come from wildlife-rich areas. We wear diamond and sapphire jewellery made from stones mined in areas where gorillas or lemurs live; and we carry around mobile phones which use coltan, 80 per cent of which comes from a single national park in Democratic Republic of Congo. Through global consumer culture, our everyday lives are bound up with the fate of wildlife populations that are far distant from us.

In this book I will explore the patterns in the wildlife trade to investigate whether our focus on front-line problems, or proximate causes, means we miss the important global dynamics that drive species onto the endangered list. Essentially I will be asking whether conservationists are right to focus on poverty as the driver of the illegal wildlife trade. This requires an understanding of other threats to wildlife, and the ways that poverty and conservation interact; it also requires further investigation of the assumption that poverty drives people to poach, to encroach on protected areas for grazing and agriculture.\textsuperscript{25} Looking at conservation from this vantage point we then have to think about whether the solutions put forward for wildlife, such as increasing anti-poaching patrols and enforcing park boundaries, are effective or not.

This raises the second major theme in this book: why do some attempts to conserve wildlife end up pitting local communities against conservationists? I will explore why clashes continue between local communities and conservation schemes around the world, and attempt to explain why they are regarded as unjust impositions, despite their good intentions. This requires us to face the difficult challenges in conservation, to delve into its darker side and examine the messy realities of apparent conservation successes. The purpose is not to make us throw our hands up and stop supporting conservation – far from it. Instead we need to examine what the real costs and benefits of conservation are. It is critical that we tackle these uncomfortable realities head on, so we can develop better conservation practice on the ground – for people and for animals.

This book will also examine the role conservation plays in producing and sustaining the ‘illicit’. In one sense, the development of new conservation rules can define and sustain criminality. It is important to think about what ‘criminal’ means and how criminal behaviour gets defined and sustained by conservation rules. When wildlife reserves are established, local communities can suddenly find that their everyday subsistence activities have been outlawed and they have been redefined as criminals. Chapter three explores the different ways in which well-intentioned conservation activities alienate local people as they get rebranded as enemies of conservation.

As part of this I investigate how the idea of wilderness underpins much conservation practice, and how this leads to the creation and maintenance of people-free protected areas. This drives the need to engineer wilderness. Some of the world’s best-known pristine wilderness areas are, in fact, engineered environments. Creating a national park means drawing up new conservation rules which outlaw the everyday subsistence activities of local communities, such as hunting for food and collecting wood.

The creation and maintenance of wilderness areas has also relied on more extreme and violent methods of control, including
execution. This book will throw light on the ways that violence is deployed against local communities in the pursuit of the ‘global interest’ of saving species from extinction. It will investigate how this is increasingly linked to the lucrative international tourism market, which has made some species extremely valuable. The use of violence is only part of the story. One of the main themes running through all the chapters is that we need to understand how and why conservation schemes have led to much more prevalent and insidious forms of exclusion and marginalization. All around the world millions of people have been, and still are being, displaced by a whole series of rules and regulations that criminalize them. One important arena for further investigation for this book is how these more invisible forms of exclusion and marginalization are dressed up in the language of partnership and participation, coupled with promises of new jobs in the tourism industry.

The first chapter sets out the profile of the legal and illegal wildlife trade, examining the scale of it and what is driving it. It then goes on to explain why enforcing the law has proved to be so difficult, looking at the role of organized crime in wildlife trafficking. Chapter two moves on to explore the world of global conservation practice. It examines the underlying ideas of conservation, biodiversity and wilderness, to explain how the removal and exclusion of local communities has been justified in defence of wildlife; the chapter points to the perils of policy making at the international level and the unjust effects on the ground. Leading on from this, the third chapter confronts one of the most controversial issues in conservation: poaching and anti-poaching. It explains how conservation ends up alienating people because of the use of force.

Chapter four explores why the ban on the rhino horn and ivory trades continue to be challenged and resisted – it is an issue that has caused bitter divides and the chapter explains why some Southern African countries are convinced that a fully legalized ivory trade might actually save elephants. The fifth chapter points to the importance of understanding the wider global context of conservation initiatives and examines the ways that mineral extraction poses a threat to wildlife. It shows how demand for coltan for mobile technology is sustaining a conflict in the Democratic Republic of Congo which threatens the last remaining gorillas. It also looks at how our love for sapphires has destroyed important habitats for lemurs in Madagascar. Finally, chapter six tackles the issue of tourism as ‘the answer’ for wildlife conservation, and highlights the damaging effects of souvenir hunting and the ways that landscapes are redesigned to meet tourist expectations.

The purpose of this book is to explore the ways in which wildlife conservation focuses on immediate and localized problems; it examines whether this approach prevents us from recognizing and tackling wider global dynamics that drive species onto the endangered list. The book is devoted to understanding the complex realities of conservation, and that includes exploring its darker side, the very real costs that are felt by the world's most marginalized communities. Whether we like it or not, human communities are involved in actively managing wildlife habitats around the world. It is vitally important to understand this and engage with it if we are to design and implement better conservation practice on the ground.
CHAPTER ONE

THE INTERNATIONAL WILDLIFE TRADE

ALL OVER THE WORLD wildlife is consumed as food, medicine and clothing. I have often flipped through menus and seen shark’s fin soup or bird’s nest soup and wondered if it contains real shark fins and real bird’s nests. If the restaurant does use these ingredients then I wondered where the chef gets them from, and how these exotic delicacies were harvested. One place that bird’s nests are collected is Thailand; in the limestone outcrops between Phuket and Krabi I have watched the collectors climb up precarious bamboo poles tied to the cliff sides. But I did not know what happened to the nests once they had been collected — maybe the collectors sold to a dealer who exported them all over the world. I wondered what other products were traded alongside the nests and whether all of the products were strictly legal and sustainable.

On one of my fieldwork trips to Madagascar I noticed a large ship anchored off Nosy Be island. About fifty people were walking slowly, ankle deep in sea water, and it seemed that they were staring
intently at their own feet. It made quite a startling picture. I asked islanders and representatives of local conservation organizations why so many people seemed so interested in staring at their feet in the sea, and where the ship was from and why it had come to Madagascar. Again, collecting wildlife for food was the answer. The ships came from China and local people were paid well (by local standards) to walk around the seashore at low tide looking for an expensive delicacy: sea cucumbers. There is no local market for the sea cucumber: people in Madagascar do not eat them. But conservation organizations pointed out that it was easy to get people to collect them because it was an opportunity to earn some money. The sea cucumber collection was not legal, but the ships would be in and out so fast it was impossible for the Parks Department and other government agencies to respond. I was told the same story about the Tulear area in southern Madagascar. To conservation organizations it seemed the ships were simply hoovering up the seas and taking advantage of government weaknesses.

We tend to blame poaching and illegal wildlife trading on poorer communities. We think they do it because they are greedy and do not care about precious wildlife, or because they are so poor they are forced to poach and smuggle to feed their families. But the examples of bird’s nests and sea cucumbers show that the wildlife trade is driven by wealth, not poverty. As with other products such as rice and cotton, the direction of the wildlife trade is mostly from the poorer parts of the world to richer parts of the world. Some of this demand is met by the legal trade in wildlife, but a large slice of it is met by illegal trafficking.

The trade in wildlife poses a major challenge for conservation. The reality is that wildlife trade networks, legal and illegal, span the globe and are worth billions of dollars every year. This trade has spawned international agreements to monitor and control it, high-profile NGO campaigns to encourage us not to buy illegally harvested wildlife, and a variety of enforcement agencies to control it. Contrary to the often simplistic messages about stopping poachers or the trade in wildlife, the problems posed are extremely challenging. Enforcement has proved to be a very difficult business indeed. Part of the answer lies in the lucrative profits to be made through trafficking of endangered species, which attracts organized crime. This chapter will explain the shape of the legal and illegal wildlife trade and seek to explain why it still presents such a problem for conservation by examining the successes and failures in enforcement.

THE WILDLIFE TRADE

The size of even the legal international wildlife trade is staggering; worth approximately US$160 billion per year, it is one of
the most valuable businesses in the world. Timber and seafood are the two largest and most important categories of trade. These figures only cover wildlife that is traded across international borders and is therefore recorded; but there are significant levels of trade in wildlife within countries which goes unrecorded. For example, turtles, fruit bats and lemurs are a common food source in Madagascar and are traded internally, so their value does not appear in international statistics. The scale of illegal trade in wildlife is almost impossible to determine precisely because it inhabits a shadowy world of illicit activities and criminal networks. But in 2007 the US State Department estimated that the global illegal trade in wildlife and plants was worth US$10 billion, but possibly as high as US$20 billion.¹

The scale of the wildlife trade is so great that it has sparked fears that it is driving some species to extinction. Rhino horn, ivory and tiger bones are perhaps the best-known illegally traded substances, but there are many more illegally traded animals and plants that do not grab the headlines, but result in just as much damage for individual species and for the ecosystems they inhabit. Such issues have raised sufficient concern for the international community to develop a global convention to manage it: the Convention on the International Trade in Endangered Species (CITES, discussed more fully in chapter two), which determines what species can be traded, and how, and has the power to ban international trade in species if it threatens their survival in the wild. One of the earliest and most important bans agreed by CITES was on the trade in rhino horn in 1976, in response to fears that the demand for powdered rhino horn for Traditional Chinese Medicine (TCM) would lead to the extinction of the species.

In one way or another most of us are consumers of wildlife. TRAFFIC was established in 1976 as an international wildlife-trade monitoring network, governed by a committee made up of WWF and IUCN (its two partner organizations). It provides research on the legal and illegal wildlife trade, and runs campaigns to raise awareness about particular issues in the trade.² TRAFFIC points out that ‘as human populations have grown, so has the demand for wildlife. People in developed countries have become used to a lifestyle which fuels demand for wildlife; they expect to have access to a variety of seafood, leather goods, timbers, medicinal ingredients, textiles’.³ It is tempting to think of the illegal and unsustainable wildlife trade as a problem which afflicts poorer parts of the world – Africa, Asia, Latin America – but this is definitely not the case. The trade is driven and sustained by wealthier communities around the world. Inevitably, people who live in poverty will want to use the resources around them, and when a particular species in their area becomes internationally valuable it is only to be expected that they will engage in trading it to help make ends meet.

Wealthy industrial economies such as the UK and the USA remain major legal and illegal importers of wildlife. In 2008 a report by TRAFFIC-ASIA examined the drivers of the illegal wildlife trade in the region, and concluded that the increase in illegal trading of wildlife was directly related to the rise in incomes in the region. The report detailed the complexity of the networks involved in the wildlife trade: it linked local-level rural harvesters, professional hunters, traders, wholesalers and retailers with the final consumers of wildlife, who lived thousands of miles away from the product source. The wildlife trade also provides varying levels of economic support to different communities across the world; for some it is a regular source of income, for others it is a safety net when other sources of income dry up, and for others it is a lucrative business which generates very large profits.⁴
THE GLOBAL TRADE IN MARINE LIFE

While rhinos, tigers and elephants attract the greatest degree of public attention, it is important not to forget that the largest proportion of illegal trade in wildlife is in seafood. In 2005 the British Marine Resources Assessment Group (MRAG) provided a conservative estimate that illegal fishing in Africa could be valued at approximately US$1 billion every year – a substantial economic and environmental loss for one of the poorest regions of the world. It was estimated that in Somalia the total annual value of illegal fishing for tuna and shrimp alone was worth US$94 million, while illegal fishing for sardines and mackerel in Angola was estimated at US$49 million each year. The figures are staggering. In just one illegal fishing incursion off the Tanzania coast, long-line fishing vessels from Taiwan illegally caught approximately US$20 million worth of tuna. Illegal fishing generates huge profits, which means it is a clear target for organized crime and transnational trafficking networks. This is certainly the case with the international market in luxury seafoods.

We are all familiar with caviar as a luxury food product, but there are genuine fears that caviar trade and consumption could lead to extinction in the wild. The fish that produce caviar are under threat from overfishing, pollution and habitat degradation. Caviar is a perfect example of a wildlife trade which has both legal and illegal dimensions, and which is driven by wealth rather than poverty. Caviar is the eggs (or roe) of sturgeon and paddlefish, and approximately 90 per cent of globally traded caviar is produced in the countries that border the Caspian Sea. The most sought after and most expensive variety of caviar is, of course, that of the Russian Beluga sturgeon, which takes around twenty-five years to reach maturity and begin producing the eggs. The caviar is very much in demand in the world’s wealthy states and TRAFFIC estimates that Beluga caviar can fetch €600 per 100g in delicatessens in Europe and the US.

One of the problems with the caviar trade is that some types of caviar (such as the Baltic sturgeon) are listed under CITES Appendix I, which means a total trade ban, while others are listed under Appendix II, which allows for strictly controlled trade. Caviar is one of the few examples of a ‘split listing’ under CITES, where trade from some countries is banned, while it is permitted from others. This means it can often be very difficult to enforce CITES regulations because illegally fished caviar can be disguised and then traded as legally produced caviar. There are tensions between member states in CITES over regulation of the caviar trade. Sturgeon specialists continue to argue over whether stocks are recovering and whether any fishing at all is sustainable in the longer term. In the last ten years there have been calls for a complete ban on the caviar trade to allow the
species time to recover; but these have been met with counter-
arguments that it is an important economic sector for some areas
of the Caspian Sea and a complete ban would unfairly punish
legitimate and sustainable producers.

The caviar trade highlights the links between wealth and poverty
and the ways in which the international wildlife trade is sometimes
facilitated and driven by wider changes in world politics. Caviar
production became a vitally important source of income for local
communities in the Caspian Sea area following the collapse of the
Soviet Union, and economic problems in Iran also prompted
unemployed locals to switch to caviar fishing, some of it illegal.
Despite the expansion of legal aquaculture (effectively caviar
farming) in the Caspian Sea, a large slice of the international trade
is met by illegal fishing. For example, in 2001 the illegal caviar
catch was 12 tonnes, which was probably ten times the size of the
legal catch. The illegal trade meets demand in Europe and the
USA, and is dependent on the use of false permits.

It is not just economic problems in the Caspian Sea area that
explain the challenges of the caviar trade. The high value of the
product has attracted the attention of organized crime: illegally
produced caviar is much cheaper than legally fished caviar, but
can still generate huge profits. In 2003 police officers in London
ran Operation Ribbon, in which they raided a series of shops on
Kensington High Street and uncovered a link between illegal
caviar and the Russian mafia, involving extortion, violence and
even murder. The police confiscated 200 tins of caviar, which
were labelled as legal but were illegally smuggled Russian caviar;
one of the shops were prosecuted because it was determined
that they had purchased the caviar in good faith.

It is safe to say that if the volume of caviar that is traded ille-
gally is ten times that of the legal trade, then it is more than likely
that any caviar on your plate has been illegally and unsustainably
fished, and the profits have gone to organized crime rather than
poorer local communities in the Caspian Sea. Policies aimed at
shutting down illegal fishing in the Caspian Sea have to tackle
this wider context and educate consumers about the problems
caused by buying illegal caviar.

Caviar is not the only high-value fish product that is linked with
organized crime. Another important species, and one also linked
with the illegal drugs trade, is abalone, a large species of shellfish
which is found in most of the world's coastlines, especially in colder
waters off South Africa, Australia and New Zealand. Abalone has
long been an important foodstuff for human communities, and the
iridescent shell is a popular material for jewellery. The meat is
considered a delicacy and is consumed mostly in East Asia (China,
Korea, Japan) but also in the US, New Zealand and Chile. As with
other lucrative wildlife, abalone farming has also begun to meet the
demands of the global market. Abalone harvesting is usually
restricted and done under licence to prevent over-exploitation, but
South Africa and New Zealand present real problems for legal and
sustainable fishing.

South Africa's abalone population is perhaps under the greatest
threat from illegal fishing; but the drivers of illegal fishing are
highly complex and stretch out through South Africa, the wider
Southern African region and on to East Asia. In South Africa legal
abalone fishing was done under licence until 2007; it required a
government permit which was issued on an annual basis. In 2004/5
South Africa issued licences to 300 people, but the industry as a
whole employed approximately 800 people. Since the early 1990s,
the South African government has been concerned about the
apparent increase in illegal harvesting. Records of confiscation
between 1996 and 2006 show a tenfold increase in the amount of
illegally caught abalone, most of which was exported to Hong
Kong. It is difficult to determine how much illegally caught
abalone sells for, but some estimates suggest it goes for between US$100 and US$300 per kilo. In an attempt to control the trade the government has consistently reduced the amount of catch they allow, so that in 2006/7 the total allowed catch was just 20 per cent of the catch allowed in 1995/6 (125 tonnes compared with 615 tonnes). The South African government applied to CITES for an Appendix III listing (which means the trade is closely monitored and controlled), and announced a ban on all commercial harvesting of abalone in 2007. However, illegal harvesting has continued, and estimates put the illegal catch at six to ten times greater than the legal catch. The South African government estimated that it costs just over US$3 million a year to deploy 70 officers twenty-four hours a day to patrol the abalone fishers, and this is on top of support provided by the Parks Department.

TRAFFIC raised concerns that the 2007 ban would simply drive the trade underground, and encourage commercial fishermen to start working illegally. To combat this, the South African government said it would encourage the unemployed fishermen to use their skills in tourism, primarily whale watching and cage diving with great white sharks. The South African government has also promised greater investment in farming of abalone, but the problem is that it takes five to seven years for the shellfish to mature; this means it is highly capital-intensive at the start and takes a long time to generate a profit. Here again we see there are sharp differences over whether criminalizing a trade in wildlife is the best way to ensure its conservation. Indeed, one part of the explanation for the upsurge in poaching in the mid-1990s was that the local mixed-race (or ‘Coloured’) communities felt that fisheries should be opened up to allow a more equitable distribution of fishing rights; this built on historical grievances dating from the apartheid era when Coloured communities were able to make a living through fishing in the absence of many other opportunities.

Regional dynamics are also important here. For instance, records show exports of abalone to Hong Kong from Zimbabwe and Swaziland (both are landlocked countries), and from Mozambique and Namibia. The South African government sees Namibia as a particular enforcement challenge because it does have one legal abalone aquaculture farm which exports to East Asia; this means that illegally caught abalone from South Africa could be hidden under the cover of legal farmed abalone. The fresh abalone is dried or canned in South Africa to make it ready for export; the dried abalone weighs only 10 per cent of the fresh weight, which makes it easier to hide and smuggle across international borders.

The dynamics of the illegal abalone industry are also interlinked with trades in other illegal goods. It is initially hard to imagine how abalone might be linked to a massive crime wave and a drugs epidemic, but sadly it is. The rise in value of abalone in the late 1990s attracted the interest of drug gangs in the Cape Flats area of Cape Town. Researchers at South Africa’s Institute for Security Studies found that the gangs took control of large parts of the abalone fishing industry, and it was then not a huge leap for them to begin bartering abalone with other criminal networks in Cape Town. In particular, the value of abalone brought Chinese Triad gangs already active in South Africa to Cape Town, from where they could export the shellfish to Hong Kong and elsewhere. The Triads paid for the abalone with the chemicals (ephedrine and pseudoephedrine) used to make methamphetamine, a crystal form of speed which is known locally as ‘tik’. As a result, in 2005–07 Cape Town experienced a 200 per cent surge in drug-related crime, and it seemed that parts of the city were gripped by a tik epidemic.

The easy answer is to call for better enforcement and a crackdown on poaching. But this is too simplistic. Eliminating illegal
abalone harvesting also has to involve dealing with much more complex social, economic and political problems. For instance, the smuggling routes used for abalone also carry a range of other goods including counterfeit clothes, other synthetic drugs, guns, cigarettes, diamonds and trafficked human beings. The ‘abalone problem’ is not something that can be dealt with in a one-dimensional way through more fisheries patrols, banning commercial fishing or the development of viable and legal abalone farms; instead it will involve dealing with the reasons why some communities in Cape Town have been gripped by tik, which opens hard questions about the legacies of the apartheid era, violence, poverty and lack of opportunity in areas like the Cape Flats. Furthermore, it would have to tackle Triads and the other transnational smuggling networks that move the shellfish from South Africa, through the Southern African region and on to Asia. TRAFFIC, among others, have argued that the 2007 ban merely pushed the trade underground, made it harder to control harvesting and alienated legitimate and licensed users. The ban may have increased the value of abalone, which encouraged Triads to get involved, driving a new drugs craze in South Africa. These complex global dynamics present a real problem for enforcement agencies. This is not confined to the lucrative trade in shellfish either, as we will see below. The same challenges exist for those keen to save the world’s last remaining tigers.

THE TIGER TRADE

The dramatic decline in wild tigers is a high-profile conservation issue. The tiger is an extremely charismatic animal and an icon for the conservation movement. Tigers make regular appearances in Western popular culture; in children’s stories like The Jungle Book (Shere Khan) and Winnie the Pooh (Tigger), in films, in oil company adverts (Exxon/Essol); they also feature heavily in conservation NGO campaigns and as a key tourist attraction in India. In India there is a long history of cultural attachment to tigers, and as the country cements its position as one of the world’s leading economies, the demand for wild tiger watching from the growing middle class has increased.

The iconic status of tigers is also linked to the fact that they are on the IUCN Red List as one of the most endangered species in the world. Despite conservation programmes such as Project Tiger in India, an international trade ban on tiger parts and support for the creation of new biological corridors to allow tigers to move between habitats, they continue to decline in the wild. TRAFFIC states that tigers are ‘an iconic species in danger of extinction’. IUCN estimates that of the 5,000 wild tigers left, 75 per cent are found in India, with just a handful left in China. The causes are loss of habitat and the illegal trade in tiger parts. IUCN figures show that tigers have lost approximately 93 per cent of their historical range and habitat. It is estimated that tiger habitat has contracted by 41 per cent since the mid-1990s (with the greatest losses in India), and remaining habitats are increasingly fragmented. In the past, tigers were found from Turkey to the eastern coast of Russia, but many of the sub-species that inhabited these historical ranges are now extinct. Since the start of the twentieth century tigers are no longer found in south-west and central Asia, in Java and Bali; nor are they found in large areas of South-east and Eastern Asia. These days tigers are found in thirteen range states: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam; they may also still be found in North Korea but there is little up-to-date information on populations there. IUCN identifies the main causes of habitat loss as conversion of forest land to agriculture and silviculture, commercial logging, and human settlement. Of course the loss of habitat also
means that tigers are more likely to come into conflict with local communities who may kill them to protect livestock.16

The second threat to tiger populations is the trade in tiger parts, which is illegal under international regulations as agreed by CITES. In the mid-1990s, when the Environmental Investigation Agency (EIA) was campaigning against the rhino-horn trade, their investigators in China and Taiwan, among other countries, found that they were also stumbling across illegally traded tiger parts. Tiger bone has long been used as an anti-inflammatory in Traditional Chinese Medicine, and other parts such as claws and fat are also used in medicines; in contrast, tiger skins are mainly used for ornamental purposes and as fur trim in clothing.

China banned domestic trade in tiger products in 1993, instituting a public-education campaign and promoting substitutes to tiger-based medicines; this approach was combined with more legalistic and punitive measures such as greater enforcement and punishment for law breakers. Recent TRAFFIC research indicates that the CITES regulations and the Chinese ban has enormously reduced the sale of tiger products in China. Undercover surveys found very little tiger bone available in China, and fewer than 3 per cent of 663 shops surveyed claimed to sell tiger products.17

However, the illegal sale of tiger parts does continue, albeit on a smaller scale, not only in China but in several other Asian countries, including Malaysia and Vietnam.18 For example, an EIA undercover investigation in 2008 found fourteen shops selling big cat skins in contravention of national legislation and CITES regulations. Traders noted a decline in demand for skins from the Tibetan community following the Dalai Lama’s call to end the use of big cat skins in traditional robes (discussed further in chapter 3); however, snow leopard and tiger skins were still trafficked from a diverse range of countries including Vietnam, Afghanistan, India and Russia. The estimated prices for a tiger skin ranged from US$15,000 to US$22,000 over the period 2005–8.19 IUCN also points out that many medicines contain fake tiger bone, and that the labelling and advertising of these fake medicines sustains the wider demand for tiger products. The EIA is sufficiently concerned about the situation to make the illegal trade in tiger parts one of their major campaigns, centred on ‘Species in Peril’.20

The problem is often attributed to a lack of political will and poor enforcement. The trade is extremely complex and stretches across a number of different countries that produce and consume tiger products. It is not just China and its neighbours that consume tiger parts: demand for TCM comes from wealthier communities all over the world. It is also clear that illegal traders and smugglers can only operate with some degree of complicity from officials, either through turning a blind eye to illegal activities or by actively assisting it.

NGOs often lay the blame at China’s door for failing to do enough to prevent the trade in tiger parts, but other countries also lack proper enforcement measures. A recent TRAFFIC report, Paper Tigers?, states that while there is no evidence that the US captive tiger population plays a major role in the illegal tiger trade, the relevant US legislation is poorly enforced and contains a series of critical flaws. It is estimated that the US has around 5,000 tigers in captivity (in zoos, circuses and private ownership). However, the TRAFFIC report found that the US government has no way of knowing how many tigers there are in captivity, where they are, who owns them or what happens to their body parts when they die. As a CITES signatory the US has a duty to ensure that captive tigers do not enter the illegal trade in tiger parts. There is a continuing illegal trade in tiger parts in the US, with products imported from East Asia to the US. For example, official trade records show that between 2001
and 2006 the US Fish and Wildlife Service seized more than 250 shipments of products, mostly traditional Asian medicines labelled as containing tiger.21

The persistence of trade in tiger parts has led some to suggest that a legal, controlled and sustainable trade might be the best way to conserve the species in the long term. This argument has caused deep divisions and sparked an ongoing controversy. The continuing illegal trade in tiger parts has inevitably led to claims that legalization of the trade is the best way to secure the tiger's future. The issue of the tiger trade is complicated by the existence of legal tiger farms in China. The owners of the farms have been pressuring the Chinese government to reopen a legal trade in tiger parts, claiming that the tigers in the farms are reared and slaughtered humanely. The idea behind the tiger farms is similar to that behind the creation of bear farms in China in the early 1990s: that they can service a legal trade and prevent poaching in the wild. It is estimated that there are currently 4,000 tigers in the farms, with claims that they could breed up to 100,000 in the next ten to fifteen years. This is a potentially lucrative industry; it is possible that a whole animal could fetch US$40,000 while individual parts might attract even higher prices, from US$20 for claws to US$20,000 for a skin.22 However, the tigers have no value in the legal wildlife trade. Unlike those who own the bear farms, the owners of the tiger farms cannot legally trade their produce; instead they have stockpiled tiger parts in the hope of future legalization.

NGOs like the International Fund for Animal Welfare (IFAW) and Save The Tiger Fund are opposed to the development of tiger farms. In 2007 the fourteenth conference of CITES also agreed to call for an end to legal tiger farms in China. Opponents point to the inhumane conditions of the farms and claim that the owners of the farms are already engaged in the illicit trade in tiger parts, and therefore do not have the interests of tigers at heart. They also point out that the bear farms have not prevented bear poaching to feed the demand of the TCM trade. For numerous tiger conservation organizations, the only answer is to campaign against the use of tiger parts for TCM and definitely not to meet the demands of the trade through legalized farming.23 In any case it would seem that any legalized trade in farmed tigers would start to reopen a market for tiger products that has already seen a sharp decline in China, effectively overturning the efforts and developments of the last fifteen years. I will return to the issue of legalization rather than banning as a solution in chapter four because it is a critically important and highly divisive issue in debates about the ivory and rhino horn trades. One of the main arguments against legalization is the difficulty of enforcing regulations so that the trade is sustainable and controlled. These failures are the result of multiple and complex challenges which are overlooked in favour of simplistic arguments and easy fixes.

**ENFORCEMENT**

The problems with enforcement are partly the result of under-staffing and a lack of trained wildlife officers. In the UK there are approximately 600 trained wildlife officers to cover all entry ports to the UK. HM Revenue and Customs is responsible for enforcing the international rules that regulate the trade in species of flora and fauna listed under CITES. But 30,000 species of plants and animals are listed under CITES; some are covered by a trade ban, but regulated trade is permitted for many species on the list. This makes it difficult for individual customs officers to determine whether an animal or its derivatives are being traded legally or not.24 Although most regional police forces in the UK have a dedicated wildlife officer, some areas are still left without police expertise to deal with wildlife crime. TRAFFIC-Asia tried to tackle this by producing a
booklet of species that are illegally traded in their region. The
description of freshwater turtles provides a window on the prob-
lems customs officers face: the turtle is often traded in paste form,
so wildlife officials and customs officers would find it almost impos-
sible to determine whether the paste they had intercepted was from
an illegally traded endangered species.25

It is difficult to determine which agency should be responsible
for tackling organized crime networks when they engage in
wildlife trading. This is reflected in the range of agencies respon-
sible for combating wildlife crime. If a consignment of ivory is
trafficked into the UK via Heathrow Airport, it is unclear whether
this is the responsibility of the Department for Environment,
Food and Rural Affairs (DEFRA) as the government department
responsible for environmental issues, or maybe the airport author-
ities, or Customs and Excise, or the local police force, the national
police force in the arrival country or the country of origin, or

Interpol. In effect an illegal consignment of ivory at Heathrow is
the responsibility of all those agencies, but for many of them the
main concern will be drugs or terrorism, so it is easy for wildlife
crime to slip past unnoticed.

In the UK each police force has its own wildlife officer, but the
police authority which deals with wildlife crime is the National
Wildlife Crime Unit (NWCU). It is based in North Berwick (in
the south-east of Scotland) and draws together a range of agencies
including the police, the Home Office and HM Customs and
Revenue.26 The UK government has also set up Partnership for
Action Against Wildlife Crime (PAW), a sub-section of DEFRA,
to co-ordinate and support the UK networks of police wildlife
liaison officers and customs wildlife and endangered species offi-
cers. PAW also aims to draw attention to the growing problem of
wildlife crime and to raise awareness of the need for tough
enforcement action. Most police forces now have at least one
wildlife liaison officer, though many of them carry out these duties
in addition to their other policing responsibilities.27 Although
PAW provides co-ordination, wildlife crime can be encountered
by multiple agencies including national and regional police forces,
customs officers and animal groups such as the Royal Society for
the Prevention of Cruelty to Animals (RSPCA). This makes
enforcement very difficult.

The case of Operation Charm in London clearly illustrates
the problems involved. The Metropolitan Police, responsible
for the London area, started Operation Charm in 1995, and it
remains the only police initiative against the trade in endangered
species in the UK. Operation Charm has had some success in
Charm seized over 30,000 items made from endangered species.
These ranged from well-known illegal goods such as leopard fur
coats, stuffed tiger cubs and ivory carvings, to less familiar items

1.3 Pufferfish for sale to tourists, Phuket (2008)
such as Arowana fish from Asia, prized by aquarium enthusiasts and thought to bring good luck to owners. However, it was not until 2006 that Operation Charm had its first ‘enforcement success’, when the owner of a Traditional Chinese Medicine shop pleaded guilty to eighteen charges under the Control of Trade in Endangered Species (Enforcement) Regulations. He had been selling materials made from orchids, saiga antelope, musk deer, bears and seahorses.  

Operation Charm has mostly focused on seizures of illegal goods, and it operates via a combination of law enforcement and awareness raising through publicity campaigns. It covers TCM, fashion and decorative items, food (mainly bushmeat and caviar), and the trade in live exotic animals. The initiative has been supported by the Federation of Traditional Chinese Medicine and the London Chinatown Chinese Association. It has received endorsements from international celebrities, such as the actors Harrison Ford and Ralph Fiennes, as well as the champion Chinese snooker player Ding Junhui.

In 2006 Operation Charm became a partnership between the Metropolitan Police Wildlife Crime Unit, the Greater London Authority, the Active Conservation Awareness Programme (ACAP), IFAW, WWF-UK and the David Shepherd Wildlife Foundation (DSWF). This range of actors reflects the variety of organizations involved in combating wildlife crime. It also provides part of the explanation for why the wildlife trade is so attractive to organized crime. It is an extremely lucrative industry, but traffickers know there is a relatively low chance of being caught because so many different agencies are ‘responsible’, and the main law enforcement agencies do not have the funding, staff or support to make it their top priority.

The complicated range of organizations involved at the national level is compounded when we look at the relationships between national agencies and international agencies involved in dealing with wildlife crime. The UK response also has to integrate with international initiatives to combat wildlife crime. For example, PAW works with Interpol, an organization which deals with organized crime, terrorism, drug smuggling and people trafficking. Interpol has been dealing with environmental crime since 1992. In 2002 Interpol set up a separate section for wildlife, which is an indicator of the value of the trade and the involvement of global organized crime networks. Since 2006 Interpol has had a full-time officer to manage the wildlife crime programme; however, it has been reliant on external assistance. Interpol states that the expansion of the wildlife crime programme has been supported and assisted by conservation and animal welfare NGOs: IFAW, Safari Club International and the Bosack and Kruger Charitable Foundation. The Wildlife Working Group in Interpol has a number of duties which include maintaining an international network for the exchange of information on wildlife crime; enhancing domestic operations in each country through cooperation and coordination; assisting in the training of wildlife enforcement officers in developing countries; encouraging the integration of wildlife enforcement activities within broader international wildlife conservation initiatives; and improving international communication with member countries by coordinating and leading international meetings with regional representatives. The involvement of Interpol draws our attention to the fact that global networks of organized crime are heavily involved in the wildlife trade.

One of the problems that conservationists face is that much of the illegal trade in flora and fauna is carried out by networks of organized crime. The trade is worth billions of dollars each year. The illegal trade in wildlife is so lucrative that it has attracted the attention of organized crime, including the Mafia, Yakuza and Triads. The trading networks and groups involved are often also
engaged in other forms of illegal trade such as drug smuggling, people trafficking and illicit arms trading. The illegal trade in wildlife is attractive because the rewards are high and the chances of being caught are comparatively low.

Traffickers make use of new technologies to trade wildlife, and the internet has proved to be an important means of selling wildlife across the world. In 2008 IFAW published Killing with Keystrokes, the results of its fourth investigation of online trade in CITES Appendix I and II listed species. It followed 7,122 online auctions in eleven countries over a six-week period. Their study revealed a very high volume of illegal trade in endangered species, worth US$450,000 in total. IFAW identified enforcement as a critical problem. For example it is almost impossible to determine if the ivory offered on the internet is legal or not, and even after eBay banned all cross-border trade in ivory on its site, it was still found to be responsible for 83 per cent of ivory sales and 63 per cent of all wildlife sales on the sites being monitored. Ivory was the biggest category, followed by exotic birds such as hyacinth macaws and Moluccan cockatoos. Traders are able to exploit loopholes on the internet, such as sites that allow personal ads and message boards where potential traders can make contact and then conduct the transaction privately, thereby flouting the regulations of the internet site. They can also circumvent regulations by using creative spelling such as ivorie or iv*ry, as well as using counterfeit permits and documents which are impossible to verify online.

The report also drew attention to some surprising results, which served to underline the argument that the problem in the wildlife trade is demand from the rich world. For example, the US was responsible for more than two-thirds of the trade, 70 per cent of the international trade in protected species, which is nearly ten times the value of the next two culprits, the UK and China. The internet offers a new range of challenges to enforcement agencies that are already overstretched and underfunded. Taking the example of eBay, the company has worked with IFAW to stamp out illegal trade of animals on its site; however, the policies are often poorly enforced, relying on voluntary compliance or voluntary reporting by other users. eBay Australia has an outright ban on all ivory sales, but even so a small number of ivory sales were still conducted there. The problems are magnified when we consider that organized crime is not just involved in trafficking wildlife – it is also responsible for the production of illegally traded goods.

**COCKLING IN MORECAMBE BAY**

The case of cockling in Morecambe Bay, a stretch of coastline in Lancashire in the north-west of England, illustrates why organized crime is interested in the wildlife trade, how conservation and crime are interlinked and how the involvement of multiple agencies acts as a barrier to enforcement.

In 2003–4 something new was happening in Morecambe Bay, which is just one mile from my home. It has been worked by a small number of fishing boats and cocklers for years. Historically, cockle picking in Morecambe Bay was a small-scale local enterprise which provided seasonal employment for a few local families with permits to fish the cockle beds. The practice of cockle picking is potentially dangerous. Local residents are only too aware of how treacherous the sands can be: the tide rises rapidly, and once it starts coming in anyone on the sand has thirty minutes or less to get back to land. People are easily trapped two or three miles out in the middle of the bay, risking drowning or being caught in quicksands. Cross-bay walks are popular summertime activities, but are organized and led by the ‘Queen’s Guide to the Sands’, who knows the channels, tides and areas of quicksand.
cockle bonanza was so lucrative that it started to attract organized criminal networks that specialized in the provision of cheap labour through people trafficking, primarily from China. This produced stiff competition, and even violence on the sands, between rival groups of cocklers who wanted to maximize their share of the profits. Some cockle pickers even needed ‘minders’ to ensure their safety on the sands.

The bay is a public fishery, and so it is hard to regulate who uses it.\textsuperscript{34} The North-West and North Wales Sea Fisheries Committee issues the permits for cockle fishing in the area. These licences are intended to provide some level of protection for the cockle beds through the prevention of overfishing, and stipulations about removal of undersized cockles. The sands are extensive (120 square miles according to the coastguard services) and with little police presence in the area it was easy for the illegal cocklers to avoid detection. As an individual involved in prosecuting the case put it: cocklers are up to three miles out on the sands, and the Department of Works and Pensions do not have the staff to send people out to check whether they have work permits or not.\textsuperscript{35} This made illegal cockling attractive: large profits could be made with little chance of detection.

Until 2004 the story of the arrival of criminal gangs, illegal labour and the cockle gold rush did not really register in the public mind. It was the deaths of twenty-three cockle pickers that shed light on this industry. Late on the freezing cold night of 5 February 2004 emergency services were called out for a search and rescue mission for a group of Chinese cockle pickers stranded on Morecambe Bay. Their gangmaster, Lin Liang Ren, had transported the cockle pickers to the sands, provided them with housing and supplied them with tools. They were out on the sands late at night in order to fill two lorryloads of cockles.\textsuperscript{36} Lin had accepted the order even though it meant his cocklers would

In 2003 this all changed. The sands were teeming with people fishing for cockles – their four-wheel drive vehicles were buzzing around and huge refrigerator lorries waited at the shoreline to load up the catch. The value of cockles spiralled from approximately £200 per ton to £1,300 per ton. The shellfish bonanza beneath Morecambe sands became a major attraction for organized crime, with up to £8 million worth of cockles in the sands at any one time.

Some of those involved in cockling in Morecambe Bay explained the rise in value as the result of a shipping accident in Spain. When the *Prestige* tanker sank off the coast of Galicia in Spain, it spilled 64,000 metric tonnes of oil, much of which polluted local shellfish habitats. The resulting closure of cockle beds in Spain prompted Spanish shellfish companies to switch to Britain to meet demand. This created a gold-rush mentality. The
have to work through the night in dangerous conditions to meet the deadline. The Chinese cocklers did not know about the hidden dangers of the sands until it was too late, and Lin delayed calling the emergency services for fifty minutes after it was clear that the cocklers were caught by rising tides. Fearing the worst, many of the cocklers made calls home to relatives in China to say goodbye. Some of the survivors of the disaster were so fearful of being found by the authorities that they tried to hide from the coastguard rescue helicopters.

The cockle pickers themselves had been trafficked into the UK from Fujian by Chinese Snakehead gangs who had charged their families up to £20,000 for passage to the UK. Many of the pickers were locked into the industry, afraid to escape or speak out about conditions for fear of deportation. The local member of parliament, Geraldine Smith, pointed out that one of the problems was that the Chinese government refused to recognize illegal Chinese immigrants as Chinese citizens; this meant that if police and immigration services detained the workers, they could not be deported back to China because the Chinese government would not accept them. In effect they would become stateless people, so there was little point in the authorities in the UK detaining illegal Chinese workers.

The pickers were paid a mere £5 per sack of cockles, while Lin would have received three times that amount, and the company that he sold them to would have made an even greater profit. In 2006, after a protracted investigation and legal proceedings, Lin was convicted of the manslaughter of all twenty-three cockle pickers. The company that bought cockles from Lin was cleared of any wrongdoing; it was determined that the companies could not have known that the use of Chinese labour would have involved illegality. The newspaper stories and court case revealed glimpses of the terrible human stories behind the incident. For instance the families of the dead workers still owe the debt to the gangs that trafficked their relatives to the UK; the workers had hoped that a short period of work in the UK would provide their families with a better life, and had fully intended to return home after a few years. Some of the dead were parents who had left their children with relatives, so that they could work to give their families a better life.

The deaths seemed to come out of nowhere, but in fact UK government authorities had been made aware of the potential for such a disaster prior to 2004. Interestingly the first alarm bells were sounded not from the sands, from conservation agencies or from immigration authorities, but from local traffic police working on the M6 motorway, who had been stopping the vans used to transport the workers from Liverpool to Morecambe Bay because they were not roadworthy. Local MP Geraldine Smith had written to the Home Office in June 2003 to express concern about the safety
of the Chinese cocklers. She complained that they were being transported in overloaded boats across dangerous waters and that they were being paid a fraction of the usual rate for cockle picking. She had also tried to get the Department of Works and Pensions to see the bay as a workplace, and invoke Health and Safety regulations. But because it was a coastline it was difficult for officials to see it in the same way as a factory or an office. At the time, Fiona Mactaggart, the Home Office Minister, said the immigration service had too few resources to deal with the problem. An investigation was ruled out, because it would ‘serve little useful purpose’. Following the trial in 2006, the UK government was criticized for not heeding these earlier warnings.

The whole episode has had a serious impact on the environment in the Bay. In fact, in 2005 the beds were closed to legal cockling by the North West and North Wales Sea Fisheries Committee because they had been overused and the cockles failed to reproduce. These days it is mussels that attract migrant workers and refrigerated lorries from Europe. The global demand for mussels, and seed mussels for Dutch mussel farms, has reshaped and reorganized shellfish collection in Morecambe Bay but the underlying dynamics remain the same: consumer demand in wealthy countries for wildlife drives the involvement of global criminal networks in places all around the world.

CONCLUSION

While big charismatic species like rhinos and tigers might grab the headlines, the illegal wildlife trade is massive, and tackling it is extremely challenging. The wildlife trade is driven by wealthy states, such as the US and UK, as well as by affluent communities in emerging economies, like China and India. People all over the world consume wildlife in a variety of ways: as medicines, ornaments, foodstuffs and clothing. The trade in shellfish demonstrates very clearly that those involved in the illegal wildlife trade are also engaged in other criminal activities; in this sense they are not ‘wildlife specialists’; instead, trafficking lucrative endangered species is one part of a wider portfolio of illicit activities. Cockling in Morecambe Bay is a good example of this. The trade in shellfish is legal, but the large profits mean it is attractive to organized crime; these networks then provide a cheap illegal labour force to extract shellfish without a licence, which allows crime networks to capture maximum profits from the trade. This presents even greater enforcement problems than the illegal trade has attracted in organized crime; wildlife can be moved along the same international trading routes used for drugs, people trafficking and arms smuggling. Wildlife enforcement officers are well aware of this, and are keen to point out that when someone

1.6 Notice announcing that the cockling beds are closed (2009)
is convicted of wildlife crime, it is highly unlikely that they will not already be known to law enforcement agencies. Therefore, standard one-dimensional approaches such as increasing patrols in national parks or fisheries, or stepping up firepower for park rangers, are not going to work in the longer term. Taking the case of caviar, it is linked to changes in world politics such as the break-up of the Soviet Union, and to the need for waged employment in poorer areas around the Caspian Sea, but most critically it is driven by wealthy consumers keen to eat a luxury product. The same can be said for abalone, a trade which is linked to drug production and consumption, but which ultimately services a market for affluent communities in the Far East and wealthy consumers in the West.

The complex dynamics that drive and sustain the wildlife trade mean that it is very difficult to enforce regulations designed to conserve species. Conservation and crime are linked in two different ways. The first way is via the illegal trafficking of wildlife and involvement of organized crime. The second link is the ways conservation rules themselves define and sustain criminality, and then create friction and resistance, which is the subject of the next chapter. Chapter two examines why well-meaning conservation initiatives often end up pitting local communities against wildlife and reveals the perils of policy making.

CHAPTER TWO

GLOBAL ACTION, LOCAL COSTS

SEAHORSES ARE A FAVOURITE sea creature, but the international trade in dried and live seahorses is endangering them in the wild. Some 90 per cent of trade in seahorse specimens is for Traditional Chinese Medicine; they are also sold dried as curios and as live animals for commercial aquariums or as pets. Under CITES this trade is permitted as long as the producer country can prove that trade in seahorses is sustainable and does not endanger the animal in the wild. But the seahorse trade draws in all the countries that produce seahorses, including Vietnam, Australia, Mexico, Indonesia and Sri Lanka, as well as all the countries that consume them (China, USA and many members of the European Union).1 It stands to reason that there is little point in Vietnam or Mexico attempting to regulate the trade on their own. Instead it is more effective to work towards a system of international co-operation to ensure that the trade in seahorses does not lead to extinction. Consequently, wildlife and the international trade in it is a major focus for international cooperation. Wildlife populations cross
Tourists are often presented as the potential saviours of wildlife, precisely because so many of us will pay to travel halfway across the world to see animals in their natural habitats. But the role of tourists is very complicated, and they can be involved in the illegal trade in endangered species either as willing participants or as unwitting traffickers.

The case of abalone in Australia is very revealing. I was once greeted there with the curious sight of a group of tourists carrying very large polystyrene cooler boxes back onto their tour bus. Curiosity got the better of me and I asked around; the answer lay in the grey area between legal and illegal wildlife trade. The coach was carrying an organized tour from China, and for many of the visitors a tidy profit could be made from buying boxes of dried or fresh abalone from supermarkets in Brisbane. Australia is one of the primary producers of legally fished abalone. As we saw in chapter one, the abalone trade is highly lucrative, and the demand is met from both legal and illegal sources. In this instance tourists
may well be fuelling illegal fishing of abalone, but they believe they are buying a legal product that can be legally exported. The Australian authorities readily admit that illegal fishing is a real problem and they have found it hard to enforce fishing rules.¹

Many of us are caught up in this grey area, but few of us really think about whether we should buy a souvenir made of shells in Sri Lanka or take advantage of the good prices for wooden carvings in Kenya. Our behaviour on holiday can affect wildlife in unexpected ways as well — in terms not just of souvenir buying, but of how we interact with animals on holiday. In many holiday destinations we see people wandering around with animals, encouraging us to have our photos taken with them — lorises, iguanas, gibbons, marmosets and even baby elephants are touted in the world’s tourist playgrounds.

The quickest glance at holiday brochures shows us that wildlife tourism is big business, so the argument goes that wildlife will be saved if it is developed as a tourism product which attracts investment for sustainable development. However, this is based on a very crude link between tourism and wildlife conservation, which fails to recognize the potentially damaging impacts of tourism. For most tourists, souvenir shopping is an essential part of any holiday. In many holiday destinations, souvenirs are a memento of the local area and so they are produced from local materials such as wood, shells, skins and stones. As a result tourists can (often unknowingly) illegally export endangered species as souvenirs, especially trinkets made from turtle shell, seashells and some hardwoods, particularly ebony wood.

But the impact of tourism is much bigger than that, and is related to the links between tourism and organized crime. This is important because the linkages between ‘legitimate business’, illicit networks and state agencies can mean that conservation issues are pushed aside by more powerful interests in favour of building hotels, access roads, restaurants and bars. In this chapter I will explore the connections between tourism, criminal networks and conservation to explain why tourism is not necessarily the answer to saving the world’s endangered wildlife.

LEAVE ONLY FOOTPRINTS? SHELL COLLECTING AND SOUVENIR HUNTING

While conservation NGOs, governments, and tour operators try to convince us that tourism can save wildlife, our holidaying habits can have a really damaging effect on wildlife. We are sold the idea that tourists will pay to see wildlife, mountains, forests, coral reefs and beaches, and this gives local people and governments an incentive to conserve them. But this is an oversimplification. Tourists, and the infrastructure that comes with them, can have a devastating impact on wildlife. For example, some tourists use the wildlife trade to fund their trips. In 2009 police and customs officers seized two tortoises they believed were indigenous to Corfu. The detective in charge of the case pointed out that there was a real problem with people taking ‘one or two’ animals from their chosen holiday destination, to be used as family pets or to be sold to cover the costs of the holiday. Even though this kind of smuggling is small-scale compared with organized trafficking networks, it still has an impact on wildlife.²

Problems do not arise just from the impact of tourists deliberately collecting endangered species for economic gain; they are also produced by everyday ad hoc choices made by tourists. Tourist demand for seashells is a good example. Most of us at one time or another will have picked up a pretty shell from the beach
as a reminder of a day out or of a holiday. It feels as if shells are an endless renewable resource – they wash up on seashores all around the world. Shells are also made into souvenirs and jewellery for tourist consumption. But the removal of shells negatively impacts on the marine environment.

In the Maldives, one resort tried to bring home the message to tourists that taking shells, even small ones, from the beach was harming the very marine environment they had come to enjoy. Because tourists were picking up shells from the beach, the local hermit crabs were finding it difficult to find a suitable home. As they grow, the soft hermit crabs look for empty shells. Tourists were removing so many empty shells that the hermit crabs turned to anything that they could crawl into for protection. This included debris that washed up on shore, producing the strange sight of scuttling pen lids and dials from radios. The problems for the hermit crabs were caused by the everyday individual actions of the thousands of tourists who visit the Maldives every year. The apparently small individual choice to pick up a shell from the beach had a cumulative effect on the marine environment, an effect that would be invisible to tourists because their stays are so short.

In Sri Lanka it is common for beach hawkers to sell large colourful seashells to tourists, and shops are full of souvenirs and jewellery made from shells. A quick glance round the tourist shops and stalls reveals a lively trade in curios made from corals, seashells and dried animals (pufferfish, starfish and seahorses). Hotels, spas and restaurants are also decorated with marine life: shells, dried starfish and beach pebbles create the relaxing ‘garden zen’ mood of the swanky beach resort.3

Turtle shell is perhaps one of the most controversial products for tourist consumption. The demand for tortoiseshell products is a critical factor in the decline of turtle populations globally, along with egg collection and hunting turtles for meat. He

6.1 Poster highlighting the plight of homeless hermit crabs (2007)

hawkbill turtle has seen an 80 per cent decline in its population and is listed under Appendix I in CITES, which constitutes a total trade ban. However, tortoiseshell remains an important product in international trade, and the tourism industry is one of the main sources of demand. In 2009, TRAFFIC reported that tortoiseshell products were being offered to tourists in Papua New Guinea. The survey found that a total of 1,441 marine turtle and 12 freshwater turtle products (mostly jewellery items) were on sale at the airport and duty-free shops around the capital, Port Moresby. Even more alarming was the fact that 99 per cent of sea turtle products were made from hawkbill turtles. It is easy to see the target at the shops selling the turtle products, but they said only sell them if there was a demand for them from clients themselves. Papua New Guinea has a long history of
using turtle shell for earrings, decorative motifs and spatulas for taking lime while chewing betel nut. However, this use has been small-scale and had a minimal impact on local turtle populations, while the development of turtle-based souvenirs for tourists presents a much greater threat.4

In 2007 WWF urged British holidaymakers to be more careful about their souvenir hunting, and encouraged tourists to check whether handbags, belts and jewellery were made from endangered species. In 2006–7 there were 429 seizures of illegally imported wildlife products, up from the previous year’s total of 302. The main items were snakeskin goods (mostly handbags and shoes), elephant ivory carvings and more than half a ton (605 kg) of TCM. Customs officers also identified coral as a major problem; tourists who bought coral jewellery and trinkets were often unaware that they were governed by CITES legislation and it was illegal to bring them back to the UK.5

Other countries have also tried to educate tourists. In 2008, the Belgian government launched a campaign with TRAFFIC and WWF-International to educate tourists about the potentially harmful effects of their souvenir buying. The campaign was called ‘Leave a future for your souvenir’; leaflets and posters were displayed in Brussels airport and given out by tour operators. Belgian tourists mostly brought in illegal items from Thailand, DRC and Senegal, including bracelets made from elephant hair (which are widely available across Africa) and jewellery made from coral and ivory.6 TRAFFIC produced a series of online videos to educate tourists, including one called ‘Shop Carefully’ which encourages tourists in the East Asian region to think carefully before they buy, and recommends that if they are in doubt they should not buy. WWF and TRAFFIC have also produced stickers, badges, posters and leaflets to educate tourists about the harmful impacts of souvenir hunting.7

6.2. Shell souvenirs for tourists, Thailand (2008)

It is not all bad news. Educating tourists about the impacts of their choice is certainly one way of tackling the problem. On the other side of the world, in the Dominican Republic a government crackdown on sale of hawksbill shell souvenirs to tourists resulted in a 99 per cent drop in items for sale between 2006 and 2009. The crackdown coincided with campaigns to encourage the use of cow horn in place of tortoiseshell and attempts to educate tourists about the impact of buying the products. The successes in the Dominican Republic have given conservationists some hope that tourist attitudes can be changed and sellers can also change their habits. After all, if there is no demand, there will be no trade.8 It is important for tourists to think twice before they buy souvenirs made from coral, tortoiseshell or seashells because they have such a negative impact on the very places and wildlife they have come to see.
THE WOODEN CURIO TRADE

It is not just marine life that is in demand for tourist souvenirs. Wooden products, everything from chairs to carved animals, are also an extremely popular choice as souvenirs. Tourists are often delighted to see the curio stalls and markets that dot roadsides and spring up in cities all over Africa. Buying a wooden carving of an animal, a bowl, a chair or a figurine is a key part of the holiday experience. It is common to see tourists on flights out of Johannesburg boarding planes with enormous wooden giraffes wrapped up with paper and string: TRAFFIC identified the wooden curio market as an important driver of deforestation and unsustainable harvesting of valuable hardwoods in Africa. In 2002 and 2003 South Africa imported approximately US$400,000 worth of curio products from Malawi, and this only represents the formal and legal trade; many more carvings arrive via illegal trading routes.

Rosewood and ebony wood are much sought after and the trade in them can be highly lucrative. Official figures from the government of Madagascar show that the export of forestry products including rosewood, ebony wood, pinewood and medicinal plants earned the country an average of US$6.5 million per year from 2001 to 2007. A CITES review of wildlife trade in Madagascar found that while there was a greater degree of commitment to developing and enforcing CITES regulations under the Ravalomanana government from 2003, different stakeholders (such as wildlife traders, relevant ministries and NGOs) had a limited understanding of CITES regulations and there was a lack of political will at the national government level. The trades in rosewood and ebony wood are not banned under CITES; however, there are concerns that these valuable hardwoods were being harvested in illegal and unsustainable ways.

In Madagascar there is a curio market aimed at tourists, situated halfway between the airport and the centre of the capital city, Antananarivo. Wooden souvenirs are highly popular and range from small carved lemurs to the full-size African-style chairs consisting of two pieces of wood are cleverly slotted together. The carvings on all these products are intricate and demonstrate incredible skill. Wooden inlay is also very popular, with patterns and pictures are created on furniture, boxes and other trinkets through the use of different coloured woods.

Sellers are usually keen to point out that the sturdier items of furniture are made from rosewood because this is a very durable tropical hardwood that takes many decades to reach maturity. Apart from furniture and souvenirs in Madagascar it is also in demand for making musical instruments, such as guitars, across the world. The market stall operators could not understand why I was refusing to buy rosewood products, and even worse, why I was asking for curios made out of apparently inferior materials. They took offence, believing my requests were motivated by a lack of trust: that I did not believe their claims that the products were made from rosewood. Most tourists visiting Madagascar would be unaware of the problems associated with buying wooden curios, especially rosewood. During 2009, the change in government in Madagascar increased concerns about the impact of rosewood harvesting. In 2009 the new Rajoelina government banned the harvesting of all precious woods, but then gave permission for containers filled with illegally harvested rosewood to be exported. This prompted a consortium of global NGOs including Conservation International, the Madagascar Fauna Group and the Durrell Wildlife Conservation Trust to call for an international boycott of Malagasy rosewood.

Ebony has a clearer public profile, but there is still considerable confusion over whether it is legal to buy ebony products and
bring them back home. Again I draw on experience from Malawi in the mid-1990s. Many of the backpackers travelling the route through Central Africa down to South African passed through Malawi – Cape Maclear on Lake Malawi and the mountains around Zomba were popular stop-offs before travelling through the Tete corridor in Mozambique to Zimbabwe or on to Zambia. Enterprising curio dealers had come up with a solution to the problem that backpackers did not want to carry the intricately carved wooden ‘Malawi chairs’; they offered to package and post them. Some of the curios were made from ebony wood, which is restricted under CITES. Clearly other tourists had asked about this because there was some awareness that ebony was an endangered hardwood. When I asked the curio sellers about this they would immediately respond with: there are two types of ebony, ebony one and ebony two; ebony one is banned, but you can take ebony two back to the UK with no problem. This sounded convincing, but hard to check in Lilongwe in the mid-1990s before internet cafes became as ubiquitous as they are now. In fact it is not clear at all when it is legal to export ebony products; and even where the product is legally exported the wood itself may have been illegally and unsustainably logged.

Ebony is a very valuable hardwood; it is so dark that it looks black, and so dense that once polished it can look like iron. There are a number of tree species across the world from the Diospyros group that yield ebony. The African blackwood tree was once classified as ebony and is still routinely referred to as African ebony; it is on the endangered species list. It can take decades for the trees to mature, up to eighty years to reach 40 centimetres in height, which means they are vulnerable to unsustainable harvesting. It is used in numerous products from earrings to gift boxes and musical instruments. The best known are piano keys, but it is also much in demand across the world for high-quality bagpipes, oboes and clarinets. Indeed, in 2007 bagpipe owners were encouraged by Flora and Fauna International to contribute to an African blackwood replanting scheme to offset their environmental impact.

Flora and Fauna International have been engaged in developing community forestry schemes in Tanzania to try to ensure communities receive some of the benefits of blackwood logging in their area. Understandably, the vibrant carving industry in Mozambique, Kenya and Tanzania has vehemently opposed any attempt to ban or restrict international trade in African blackwood. It is estimated that 80,000 carvers rely on the industry in Kenya alone. Moves to get ebony and African blackwood listed as CITES Appendix II in the mid-1990s failed amid protests from Tanzania and Mozambique. African blackwood is clearly part of a massive industry which is sustained by global demand for carvings, furniture and musical instruments. It is another example of how legal and illegal harvesting and trading are interlinked and very difficult to separate out. It may be legal for tourists to bring a rosewood souvenir back from Madagascar or an ebony wood mask from Malawi but the demand for such curios can drive unsustainable harvesting of valuable hardwoods. Any attempt to deal with the problem needs to tackle tourist demand as well as providing incentives for local communities who rely on wood carving. A new stricter ban on wood carvings will not work.

Repression as a result of the curio trade is a real concern for non-conservationists. However, the curio industry is important to local communities across Africa, especially in tourist areas. There is profit to be gained from trying to stop people selling wooden souvenirs by the roadside if they have few alternatives for earning an income. The stalls and markets would not exist unless there was a demand from wealthy tourists visiting the country. Therefore we cannot be complacent about the idea that tourism is necessarily
good for wildlife or the wider environment; instead tourists can be involved in driving deforestation in poorer countries. In the case of wooden curios it is again demand from the wealthy world that poses a problem rather than poverty in the developing world which drives deforestation. Conservationists need to focus their attention on educating tourists and offering alternatives to poorer communities rather than simply trying to ban the trade in wooden curios or shutting down roadside markets.

THE RESTAURANT TRADE

Tourists do not just consume wildlife as souvenirs. For holiday-makers one of the greatest pleasures is trying out the local cuisine. In beach resorts this means there is a huge demand for seafood, especially lobster and conch, as part of the holiday expe-
which specifically detailed lobster fishing as a major threat to the environment. Lobster was a highly lucrative commodity, netting the country US$8.8 million per annum in the mid-1990s. While most of the lobster caught in Belizean waters is for export to North America and East Asia, a proportion of it ends up in tourist restaurants. Lobster fishing is regulated by a system of permits allocated by the Government Fisheries Department. Apart from the permit system, the Fisheries Act of 1948 also restricted what kinds of lobster could be caught; it set a legal size limit to prevent exploitation of juvenile animals (lobster with a carapace of less than 7.6 cm), introduced a closed season from February to June for lobster fishing and banned the removal of berried females (those carrying eggs) those with soft shells (because they are in mid-molt), and the use of scuba equipment while fishing. However, this proved to be very difficult to enforce and conservation organizations persistently complained that corrupt individuals in the Fisheries Department were allocating permits unfairly.

For example, A&J Aquaculture, owned by James and Andrew Wang, was given a licence to fish for undersized lobsters by the then Minister of Agriculture and Fisheries. The licence was issued because the company wanted to start up a lobster farm, but it had failed to raise adult lobsters from larvae. So the company was allowed to catch juvenile lobsters to start their farm. The Department of the Environment claimed that this was in contravention of Fisheries Department legislation, and was reported to be very unhappy with the decision. One newspaper reported that the decision to grant the licence to the Wang brothers came just three days after the Taiwanese Foreign Minister had approved a loan of US$20 million to the then UDF government to develop their southern highway development project. Clearly, there was a strong local perception that James Wang, who had a history of corrupt business activities, was being allowed to flout the national regulations on lobster fishing.

The Fisheries Department was also criticized for failing to send inspectors to restaurants to check that they were not using lobster out of season or using baby lobsters and conch. The Conservation Compliance Unit of the Fisheries Department was responsible for monitoring fishing, but had its budget cut so that its enforcement and management capabilities were stretched beyond capacity. Conservation organizations appealed to the demand side of the equation rather than just focusing on those fishing for seafood; they tried to encourage tourists to order only whole lobster rather than salads that used chopped lobster or lobster tails. It is more difficult to ‘hide’ undersized and juvenile lobster that has been illegally fished when it is served whole – once it is chopped up in salads it is impossible for consumers to tell whether the animal was a legal size.

However, the relationships between tourism and the global trade in lobsters are even more complicated than the journey from the sea to a restaurant table. Bernard Nietschmann’s study of the relationship between cocaine, scuba equipment and illegal lobster trading in the Caribbean is instructive here. It shows that the demand for lobster in the rich world means that it is interlinked with other products that are illegally traded. Nietschmann’s study demonstrates that illegally fished lobster and cocaine is traded via small fishing boats from the Caribbean coast of Nicaragua, up through Belizean waters, along the coast of Mexico and into southern Florida. The people who run the small fishing boats that transport the lobsters and drugs obviously do not want to make a return journey with empty boats. So they buy up scuba equipment and transport that back down the coast, selling it in the booming scuba tourism industry. As with the undersized lobsters eaten by tourists, the demand for this
comes from the rich world but the supply comes from the poor world.

**SHOOTING WILDLIFE**

The dynamics of wealth and poverty also explains another phenomenon in tourist resorts which many of us are familiar with: the use of animals for photographs. Playa Del Carmen on the Caribbean coast of Mexico is a booming and fast-growing tourist resort. In the evenings tourists enjoy a stroll down the central avenue, La Quinta, which is lined with restaurants, shops, stalls and bars. You can also see people offering small animals for tourists to have their photos taken with them. On a recent trip, I was intrigued by someone who claimed that the proceeds from a photo with a marmoset would contribute to marmoset conservation and breeding programmes. On closer inspection it became clear that this was a promotional activity by a well-known photo shop, since the photos had to be developed on site.

This is one end of the spectrum; at the other are animals trapped in the wild – any sharp teeth and claws are removed and then they are drugged to make them more docile and amenable to constant handling by tourists and photo hawkers. The Bangla Road in Patong on Phuket Island in Thailand is commonly known as a place filled with go-go bars and strip shows, but it is also a prime location for hawkers to sell the chance to have a photo taken with a cute animal. Young gibbons are a particular favourite, and they are often dressed up in nappies and baby clothing to make them even more appealing. However, tourists are not necessarily aware that the mother will have been shot to separate her from the baby. Such animals have a short life expectancy because they have been removed from their family group and the owners do not necessarily know how to care for them. The same goes for slow lorises, a small nocturnal mammal with large appealing eyes. Lorises have very sharp teeth, and the photo hawkers remove the teeth to ensure the animals do not bite the tourists; but this affects their ability to feed properly, and is a painful procedure. Lorises can be drugged to make them more compliant to handling, and quieter as their owners walk through the streets trying to drum up business.\(^{23}\)

It is not just small animals that are the problem: the ways elephants are used in tourist resorts in Thailand has also caused real concerns. Following the logging ban in 1989, the working elephants used in forestry plantations needed to find alternative forms of employment. Asian elephants need to eat around 120–200 kgs of food per day; and in Thailand each trained elephant comes with a mahout who either owns the elephant or works closely with the animal, making it safe to be around. For the mahout the
elephant is a source of income as well, but obviously it costs a great deal of money to care for an elephant which may live with the mahout for fifty years. After having been made redundant from the logging industry, some of the trained elephants and mahouts tried to make a living by begging in cities and tourist resorts. This caused real problems - the elephants were a danger to pedestrians and traffic, they were scared by the lights of urban areas and walking on tarmac roads hurt their feel.24

Over the past twenty years, many of the trained elephants have been funnelled into tourist camps where tourists are offered rides, or used in shows where they display their traditional logging skills, or tourists can pay to wash, feed and care for them. However, even though it is against the law in Thailand, there are still some elephants turning up in tourist resorts, where mahouts use them to beg or offer the chance to pay to feed the elephants or have your photo taken with them. Obviously baby elephants are the ones that tend to generate the greatest interest from tourists, who are attracted by the opportunity to interact with them.

It is easy to criticize the mahouts who contribute to the phenomenon of ‘street-wandering’ elephants. They are often seen as cruel people who aware that they are acting illegally, know that the elephants are in pain from walking on hard roads and are scared by lights when they are out at night. However in 2008 I was working in Thailand, researching the different ways in which elephants were used in the tourism industry, and it became clear that this was an oversimplified stereotype. Mahouts were aware that the practice was illegal and potentially distressing to the elephant. But they also expressed how much they cared for the animals and explained that often there simply did not seem to be any other option. They needed to find a way to make a living, which included keeping the elephant they had worked with for decades, and pointed out that unless there was a demand for this from tourists then they would not bring the elephants into towns and resorts.

The Thai Elephant Conservation Centre and some of the privately owned elephant camps have tried to explore alternative forms of employment in more regulated elephant camps which offer tourist experiences but which also manufacture elephant products, like elephant dung paper and fertiliser.25 Tourists need to be more aware of how their choices affect animal welfare. In Thailand there are numerous well-regulated camps where tourists can interact with elephants that are well cared for and where mahouts have good working conditions. Tourists and tour operators need to ensure that they use these well-maintained camps instead of contributing to an illegal economy of elephants being used for begging and working in poor conditions.

BUILDING TOURIST RESORTS

It is not just the ways tourist collect shells, buy souvenirs or have their photos taken with wildlife that affect the environment. When we are on holiday we do not really concern ourselves with how the hotel was built, whether the beach is a ‘natural feature’ or how the sewage system works for local restaurants. Tourism is promoted by a whole range of powerful interest groups, from the World Bank to national governments to tour operators and conservation NGOs as a possible solution to the problem of sustainable development. It is assumed that because tourism is managed by the natural world then it makes sense that tourism can be a way of generating income from protecting the environment. Tourists are keen to see apparently pristine beaches, experience suburbs in national parks or go on adventurous rafting trips down untamed rivers. Conservation NGOs claim that it pays to
conserve the ‘natural’ environment because tourists will come in their droves to see and experience it.

This is an especially powerful argument for developing countries. Their seeming lack of development has been reconfigured into a virtue – the lack of industrialization and urbanization means that their beaches, forests and mountains savannahs are a global commodity for sale on the international tourism market. For conservation NGOs, developing countries offer a chance to experience wilderness on holiday. But this fails to acknowledge the ways in which the key natural attractions for tourists have been transformed and produced by the tourism industry itself. When criticisms are levelled at mainstream or mass tourism as bad for the environment, conservation organizations and tour operators point to ecotourism as the answer. The precise definition of ecotourism is still a subject of much debate; however, it is clear that it relies on the idea that places and cultures are pristine, unspoiled and untouched by Westernization, industrialization, and even mass tourism. Contrary to what we might think, wildlife or nature-based ecotourism redefines, presents and can even create areas of ‘wilderness’, which are, more often than not, based on notions of people-free landscapes. Ecotourism developments are not ‘impact-free’ and can be linked with criminal activity in surprising and environmentally damaging ways.

There is no doubt that Western tourists love beaches. Tropical holiday brochures encourage us to experience perfect relaxing beaches, which appeal to a Western taste for the exotic and unspoiled ‘getting away from it all’ experience. This means that any land near good beaches is highly sought after and is very valuable. This love of beaches can produce a temptation to build artificial beaches or increase the size of existing beaches to meet tourist expectations. Few of us realise that the beaches we sunbathe on might be artificial structures, created by the tourism industry itself.

Playa Del Carmen is one of Mexico’s tourism hotspots. It is one of the fastest growing urban areas anywhere in the world, and it is all built on global tourism. However, the wide sandy beaches at the front of the four- and five-star resorts in Playa Del Carmen are not quite what they seem. While tourists soak up the sun, the beaches are being slowly and carefully ‘built’. This is done in two ways. The first is to place large sandbags – locally known as ‘whales’ – at the shoreline. The whales prevent the sand from washing back into the sea and help to build up sandbanks, and thereby expand the width of the beach. Guests are told that the whales protect the beach front from storm damage, which they may well do, but their primary purpose is to build up sand for guests to enjoy. The second method used is to pump sand directly from the sea floor up on to the beach to build it up. Large green hoses lead from the sea up to the top of the beach, pouring out a mixture of sand and sea water. If tourists looked a few hundred metres down the beach to an area not owned by a hotel, they would quickly see what a more ‘natural’ beach would look like; they are much narrower and dotted limestone outcrops – not exactly the picture-perfect beach for sunbathing and building sandcastles. Beach building in this way redesigns and produces a particular environment for tourist consumption. While tourists may think they are looking at a pristine tropical beach, they are in fact experiencing a human creation.

Beach building produces attractive features but it is highly damaging to the marine environment. Removal of sand from the seabed changes the currents in the water, which can have a negative impact on coral reefs and marine life further away from the beach. It also means that if a hurricane or major storm hits the coast, the extra sand is carried out to sea and then smothers coral reefs, making it even harder for them to recover. Beaches are also the nesting places of one of our favourite animals, the turtles, and beach building disrupts traditional turtle-nesting sites. Further
down the coast in Akumal, the beach is well known for being a place where loggerhead and green turtles feast on eel grass and nest on local beaches. The Centro Ecological in Akumal is keen to develop sustainable tourism in the region and turtles are a major attraction in the local area. Volunteer workers engage in education and communication activities for local residents and visitors: they give talks about turtles and have developed a display to explain the need for turtle conservation. In addition, volunteers from the Centro Ecological monitor tourist interactions with the turtles and mark out the nests on the beach to prevent disturbance. In 2009 they had ninety-nine loggerhead nests and ninety-two green turtle nests.\textsuperscript{28} However, all along the Caribbean coasts of Mexico beaches and hotels are being built, with negative consequences for turtle nesting sites.

The controversies surrounding beach building are hidden from the tourists who come to enjoy them. The case of the Caye Chapel resort in Belize is a good example of the ways in which the environment can be completely remodelled to appeal to tourist tastes and then be promoted and sold as a pristine tropical beach location.\textsuperscript{29} Its owners claim, somewhat paradoxically, that it 'has been developed as a pristine oasis'.\textsuperscript{30} In fact, the island was completely re landscaped and artificially expanded to provide an exclusive tourist resort. Caye Chapel describes itself as offering: stunning beachfront community living. Enhanced by the Caribbean Sea on its eastern shores, with a spectacular 18-hole, Par 72 championship golf course (USPGA rated)
along its western edge. Featuring a deep-water marina welcoming yachts up to 140 feet, private airstrip, and 25,000 square foot clubhouse with a magnificent custom designed bar and restaurant, conference facilities, large swimming pool complex with bar, and over 2 miles of pristine sandy beaches. The entire property has been developed at the highest possible standards and is meticulously maintained.\textsuperscript{31}

The development of the island included dredging for sand to build the beach and to allow larger boats to dock at the island. In the process, the dredging stirred up the seabed, disturbed lobster fisheries and destroyed Caye Caulker fishing grounds.\textsuperscript{32} This reconfiguration of the environment for tourism development also led to an illicit trade in sand. The sand pirates operated at night, removing sand from neighbouring islands, which was then used to build up artificial but aesthetically pleasing beaches on sand-free coral atolls.\textsuperscript{33} This phenomenon has been created because of the tourist desire to have destinations that conform to their stereotyped image of a pristine Caribbean paradise of turquoise water, white sand and coconut palms. Ambergris Caye has suffered from the activities of sand pirates more than other islands, with tons of sand being removed over time. The sand is an important part of the wider ecosystem on the island that supports coral reefs, mangroves and a variety of fauna, and so sand piracy has a significant negative impact on the environment.\textsuperscript{34}

When I was there in the mid-1990s, Caye Chapel was something of an embarrassment. The speedboat that ran locals and tourists between Belize City, Ambergris Caye and Caye Caulker passed it numerous times per day, and the reconstruction of the environment was plain for all to see. From time to time the boat captains would point at it and tut with disapproval. They would make reference to the rich American who owned it, how he planned to fly tourists in directly from Miami for holidays centred around diving, gambling and golf. At the time Belize was promoting itself as an ecotourism destination, but the rebuilding of an entire island to create an ideal tourist paradise ran against this spirit. For some in Belize, Caye Chapel was a glaring example of what happened to the environment when a corrupt politician and a foreign millionaire got together; they felt that the development was all about money and there was no one willing to stop it.\textsuperscript{35} Caye Chapel has proved to be a controversial tourist development that highlights such links between foreign investors, support from local political and economic elites and local perceptions of corrupt business practices. There was a great deal of local speculation about the way in which the owner of the island appeared to be able to dredge around the island and build a beach without proper permission. Those who opposed the development of Caye Chapel speculated that the owner was allowed to undertake such activities because he was protected by the highest political authorities in the country in return for free trips to the island, and that the owner had been careful to pay the relevant officials in order to avoid environmental regulations.\textsuperscript{36}

One of the problems for anyone concerned with the environmental impact of tourism and the need for regulations to protect wildlife is links between tourism and criminal networks. The tourism industry has proved to be a place where illicit business interests can meet up with corrupt politicians, because the arrival of tourism is often associated with an increase in crime, prostitution and the supply of drugs. Drugs may be only one part of a broader criminal business that includes legitimate business on the one hand (such as tourism), and bank robberies, car theft, arms trafficking and kidnapping on the other.\textsuperscript{37}

The demand and supply routes for drugs, particularly cocaine, have a significant impact on the direction and rates of development
in the tourism industry in Belize. For example, it was reported that cocaine trafficking brought a new spurt of wealth to the local economy in Placencia, where the local press noted the appearance of new speedboats and the beginnings of a construction boom. Similarly, there was local speculation by critics of the involvement of foreign interests and possibly criminal elements that entire resorts were bought with millions of dollars in cash, derived from the drug trade. In 1999 James Kavanagh, a citizen of Colorado, was expelled from Belize and escorted out of the country by US marshals and drugs enforcement administration officers. He had been a resort owner in Cayo District, but had been found to be engaged in money laundering and the drugs trade, using the resort as a legitimate business front for illegal activities.

The existence of illicit links between the drugs trade and tourism development means that enforcement of environmental legislation is problematic in Belize. The country has an extensive framework of environmental legislation, including the Environmental Protection Act, and a Department of the Environment. A common complaint among locally based tour guides and the conservation community was that while legislation was in place, it was rarely enforced. Godsmen Ellis, President of the Belize Ecotourism Association, stated that policing was not carried out in the face of the country's financial resources, limited workforce, inadequate technological and administrative resources, and its open borders; he suggested that very few cases of environmental violations had been brought before the courts despite the legislation that had been put in place.

One interviewee, who was involved in marine conservation in Belize, stated that although environmental impact assessments were legally required for all new tourism developments, the government office responsible for monitoring such assessments was completely overwhelmed by requests for assessments because they were poorly staffed. When conservation authorities tried to pursue prosecutions for breaches of environmental legislation, they faced opposition from powerful sets of interest groups. For example, when the United Democratic Party were in power, the Minister of Tourism and Environment, became a developer in Placencia, where large areas of ecologically important mangroves were cut to make way for tourism developments. Political opponents of such developments speculated that local business elites and external investors were able to seek protection from prosecution for environmental breaches due to their links with politically prominent figures in Belize, and their links to the ruling UDP.

The pace and direction of tourist development can also be shaped and driven by patterns of corruption. One of the major effects of corruption is that costs and benefits of any development are allocated in ways that benefit elites. Powerful politicians can be involved in shadow networks that include criminal organizations, which are then able to reshape the apparatus of the state to suit their own interests. Organized crime can enjoy protection from all levels of government, because it has invaded the structures of the state and taken advantage of its power and resources.

In this way global networks that often inextricably link legal and illegal businesses manage to incorporate developing states into the fabric of their organizations. The sector where these shadow networks are at their most pervasive and most effective in Central America is that of drug trafficking. The organizations and the networks involved in trafficking have not only incorporated the state apparatus, but infiltrated and reshaped the ways states are organized to protect and support their activities.

The Caribbean and Central America are two regions that have been targeted as trafficking routes by drug cartels. While Colombian drug cartels of the 1980s and early 1990s were highly visible and posed a direct threat to the state, by the late 1990s the focus of trafficking changed significantly, and its focus turned to
Mexico. The new breed of traffickers was more discreet and set up smaller scale organizations that are interested in co-opting key personnel within the political and judicial systems. Traffickers were also more likely to work through legitimate small businesses and contract out manufacturing and transport to specialist groups. Within the Central American/Caribbean region, Belize has not been immune to the development of this illegal international trade in narcotics. The US Department of State identified Belize as a significant drug transit country. Since Belize lies between the producing countries of South America and the consumer countries of Europe and North America, its position marks it out as an ideal route for smugglers. In addition, the unique geography of the Caribbean, and especially Belize, means that chains of hundreds of islands provide points to drop off and pick up consignments of drugs.

It is clear that on the one hand authorities in Belize were overwhelmed by the power of illicit networks, and on the other hand that elements in the formal state apparatus were engaged in illicit activities. For example, the US Bureau for International Narcotics and Law Enforcement Affairs stated that the ability of the government of Belize to combat trafficking was severely undermined by deeply entrenched corruption that reached into senior levels of government. In addition, it indicated that ministers in the government as well as police officers were involved in the drug trade in Belize.

Such shadow networks are unlikely to be concerned about the need to conform to environmental legislation as they build resorts. As a result it is not uncommon for resorts to mean mangrove clearance, beach building and remodelling of the environment in ways that have a negative impact on wildlife. All these processes are made invisible to tourists; once a hotel opens its doors to guests the processes that have led to the construction of the hotel are hidden from view. Instead, tourists are much more likely to assume that they are looking out on a pristine landscape or an unspoilt beach. They do not see that turtle nesting sites have been disturbed, that the beach might be an artificial creation, that mangroves have been removed, people have been displaced, or that the money to build the hotel came from drug smuggling.

The links between tourism, conservation and criminal activity are obviously highly complex and stretch beyond buying souvenirs made from turtleshell. Clandestine linkages between politicians, developers, tour operators and criminal networks mean that the pristine tourist paradise we demand is a fabrication built on a completely redesigned and reshaped landscape. This then challenges the idea that tourism offers a pathway to sustainable development, a means of saving the environment while offering economic growth (especially to developing countries). Powerful interests at the local, national and international levels continue to promote tourism because they directly benefit from it; the benefits to poorer and more marginalized communities are harder to see. Government and business elites at the national level and international tour operators all benefit financially from the development of tourism in places like Belize. Once we understand the ways that tourist landscapes are produced, it becomes much harder to sustain the idea that tourism and tourists might be the saviours of wildlife.

**CONCLUSION**

Tourism is promoted as a potential solution to the problem of delivering economic development in an environmentally sustainable way, and this is a bewitchingly simple argument. Western tourists are particularly attracted by apparently pristine beaches, by back-to-nature experiences and by wildlife safaris. However, the assumption that this necessarily translates into the kinds of
development that benefit wildlife is far too simplistic. The idea that tourism revenue is ploughed back into wildlife conservation to protect the animals and landscapes that tourists come to see is also far too simplistic. I do not contest the idea that in some places tourism is an important source of income for wildlife conservation. The massive and lucrative safari industry in Kenya and Tanzania are good examples of tourism activity that relies on wildlife being conserved, while gorilla-trekking permits in Rwanda and Uganda are an important source of government revenue.

However, the promotion of tourism-conservation by tour operators, government and conservation NGOs ignores the ways they are linked through crime. At one end of the scale, tourists can be both willing and unwitting contributors to environmental damage through their souvenir-buying habits. However, this is only part of the story. Holiday makers are mostly unaware of how their tourist paradises have been produced. They assume that the picture-perfect landscape or the silver Caribbean beach is a natural feature which has always existed. This is very far from the truth. Tourist playgrounds, like apparently pristine wildernesses, are manufactured environments, areas set aside by governments for wildlife, usually been cleared of people so that they conform to the global image of a wild landscape. Similarly, hotel construction in tropical areas can result in clearing ecologically important mangroves, or beach building which harms coral reefs. The complex inter-relationships between criminal networks involved in other forms of illicit activity such as drug smuggling has an effect on the environmental damage done by resort development. Money talks, and the links with powerful politicians mean that environmental regulations can be easily sidestepped.

CONCLUSION

BILLIONS OF DOLLARS ARE spent on saving species and habitats every year, but wildlife still appears to be in decline all over the world. This book started with a question: why is it that global conservation policies do not always achieve the desired effect? The answer lies in the failure to see conservation in its global context. This means that we focus on proximate causes of wildlife loss. Rather than tackling the ways demand for wildlife products is created and sustained by the wealthy world, conservation focuses on enforcement, coercion and regulation, which can have a negative and unjust impact on the world’s poorest communities. Consequently, conservation produces exclusion, marginalization and even violence for local communities. This is counterproductive: it alienates the very communities that live with wildlife, the people we all rely on to make conservation work.

The wildlife trade is one of the most lucrative trades in the world, and the huge profits combined with a low risk of being caught means it has attracted the attentions of organized crime.
INTRODUCTION


existing conservation: understanding conservation NGOs in sub-Saharan Africa', *Antipode: A Journal of Radical Geography*,
http://www.nature.org/joinanddonate/corporatepartnerships/about/ (accessed 15.02.10).


14. http://www.panda.org/who_we_are/wwf_offices/cameron/index.cfm?up=100028.01.10); the ivory and rhino horn trades are discussed more fully in chapter 4.


CHAPTER 1: THE INTERNATIONAL WILDLIFE TRADE


8. 'London raids expose Mafia caviar racket', *The Observer*, 09.11.03; 'Poachers' hunger for black gold may take caviar off the menu', *The Independent*, 20.06.01.


14. Read, M. 'Can the tiger save India?', *The Drum Chronicle*, 08.10.10.


25. Interview with Project Officer, Regional Law Enforcement Assistance, ASEAN-WEN Support Programme, TRAFFIC South East Asia, Bangkok, 06.03.08.

26. http://www.nwcu.police.uk/ (accessed 04.11.08); interview with Inspector Brian Smart, National Wildlife Crime Unit, North Berwick, 22.05.09.


29. http://www.operationcharm.org/ (accessed 08.08.08); and see http://www.met.police.uk/wildlife/operation_charm.htm (accessed 08.08.08).


34. 'Evil gangmasters who rule the cockle slave trade by fear', *The Guardian*, 08.02.04.

35. Personal comment, policeman in Lancaster, 08.09.08; see also interview with Geraldine Smith, MP for Morecambe and Lunesdale, Morecambe, 25.09.08.

36. 'Cockle gangmaster jailed for 14 years', *The Guardian*, 28.03.06.

37. Interview with Geraldine Smith, 25.09.08.

38. 'I got calls from people in the sea. The tide was coming up', *The Guardian*, 25.03.06.

39. Interview with Geraldine Smith, 25.09.08; personal comment, Morecambe fisherman, 22.09.08; and personal comment, policeman in Lancaster, 08.09.08.

40. 'Tell the family to pray for me ... I am dying', *The Guardian*, 25.03.08.

41. Interview with Geraldine Smith, 25.09.08.

**CHAPTER 2: GLOBAL ACTION, LOCAL COSTS**


10. Interview with conservation professional in Madagascar who preferred to remain anonymous (March 2004).


27. http://www.conservationsrefugees.org/ (accessed 06.08.08).


CHAPTER 3: WILDLIFE WARS: POACHING
AND ANTI-POACHING

9. ‘Gangs moving into environment crime’, The Daily Telegraph, 06.06.07.

http://news.bbc.co.uk/1/hi/sci/tech/693802.stm (accessed 07.05.08)

12. ‘Big cats under threat: tiger tiger burning bright’, The Independent, 15.02.06.
13. ‘Health fears grow as mountains of meat are smuggled into the UK’, The Observer 10.07.07; interview with TRAFFIC representative, who preferred to remain anonymous, Cambridge 13.05.09; and interview with Inspector Brian Stuart, National Wildlife Crime Unit, North Berwick, 22.05.09.
19. ‘SA Army’s ivory trail exposed’, The Independent, 23.3.92.
31. www.rwandatourism.com/parks.htm (accessed 12.05.08).
CHAPTER 4: RHINO HORN, IVORY AND THE TRADE BAN CONTROVERSY


16. ‘Marthinus puts a freeze on rhino horn trading’, Cape Argus, 09.06.08.
25. ‘The Elephant calling debate’, The Times (South Africa) 01.03.08 at http://www.thetimes.co.za/PrintEdition/Insight/Article.aspx?id=177901 (accessed 18.06.09).
CHAPTER 5: GUERRILLAS TO GORILLAS: BLOOD DIAMONDS AND COTLAN


16. 'The human cost of mining in DR Congo', 02.09.09, BBC news at http://news.bbc.co.uk/1/hi/world/africa/8234585.stm (accessed 18.09.09); and
CHAPTER 6: TOURIST SAVIORS

5. 'Holidaymakers warned off illegal wildlife goods as 163,000 imports confiscated', The Guardian (UK), 16.08.07; and 'WWF warns holidaymakers over illegal souvenirs' at http://www.traffic.org/seizures/2007/8/16/wwf-warns-holidaymakers-over-illegal-souvenirs.html (accessed 30.10.09).
7. For more information see http://www.traffic.org/campaigns (accessed 30.10.09).
14. 'Ebony on the edge', San Francisco Chronicle, 18.09.09 (accessed 15.10.09).
18. 'Chinese grants licence to catch undersized lobster', Amandala, 13.7.97; 'Fisheries regulations amended', San Pedro Sun, 1.8.97; 'Editorial: lobster
farming—who to believe?’, San Pedro Sun, 1.8.97; ‘Taiwanese mafia business at South Water Caye’, Amandala, 10.8.97.
20. ‘Lobster season opens’, San Pedro Sun, 27.6.97; ‘September 30th marks end of closed season for the Queen Conch (Strombus gigas)’, B'IS News, 1998.
23. For more information see Wildlife Friends of Thailand at http://www.wft.org/ (accessed 19.10.09).
31. http://www.cayechapel.com/ourisland.php (accessed 08.09.09). In 2009 the island was subdivided and individual estates and building plots were offered for sale after thirty years of individual ownership, but they claim to be selling to the ‘discriminating elite’.
32. Interview with representative of environmental NGO, Caye Caulker, 3.1.98; interview with Tour operator, Caye Caulker, 15.12.97. The controversial role of dredging is also mentioned in information about the resort—see http://www.ambergriscaye.com/ (accessed 25.01.05) and remains a problem; see ‘Is dredging driving away lobster in Caye Caulker?’, San Pedro Sun, 14.05.08.
33. Anonymous interviewee, Caye Caulker, January 1998. I also witnessed the activities of sand pirates while working there.
34. Coastal Zone Management Authority and Institute (undated) Beach Fronting in Belize (Belize City CZMA) p. 2. Sand mining is also listed as a threat to the Belize barrier reef by UNEP; see http://www.unep-wcmc.org/sites/wwb/reef.htm (accessed 25.01.05).
38. ‘Belize by sea: much coast to little guard’, Amandala, 26-9.97. This was confirmed by a number of interviewees who shall remain anonymous.
39. ‘Tory MP reported to ombudsman as Belize affair widens’, Guardian, 22.2.97; ‘Mr Ashcroft’s patronage’, Guardian, 22.7.99.

CONCLUSION