BACK TO THE TRENCHES: THE BLOODY BATTLE AGAINST RHINO AND ELEPHANT POACHING

Cathy Dean

Director, Save the Rhino International

This paper discusses the factors involved in the poaching crisis; the patterns of poaching, which vary from country to country; and the impact on the elephant and rhino populations of range countries. It then goes on to talk about the different approaches being adopted at local level to prevent or mitigate the effects of poaching, using examples from the field programmes supported by Save the Rhino International and its partners such as the International Rhino Foundation and several European zoos; and the approaches at international level. Finally, it touches on the consequences of the poaching epidemic, should we fail to get it under control.

The elephant poaching crisis

Unlike rhinos, not all African or Asian elephant (*Loxodonta Africana or Elephas maximus))* killings are due to poaching. Human-elephant conflict is a big problem in many areas, with elephants often being killed in retaliation attacks. Drought has also been responsible for deaths, as in the Amboseli area of Kenya in 2009, when the world-famous Echo, matriarch of the herd studied for decades by Cynthia Moss, died. The effects of drought are, in turn, made worse by the reduction of habitat and loss of seasonal migration routes, as the growing human population changes land use.

However, poaching for ivory, along with habitat loss, remain the biggest threats to elephants. China is the largest importer of ivory by weight in the world. It is carved into jewellery, ornaments and figurines. Ivory was also used in Japan, where 80% of it was carved into signature stamps, called inkans or hankos. However, research (Martin and Vigne, 2010) has showed that the market for ivory in Japan has declined, partly due to the recession, and also due to Japanese traders being uncertain about the future supply of legal ivory.

Unlike the trade in rhino horn, which has consistently been banned since black and white rhinos were added to CITES' Appendix I in 1977, there have been occasional, one-off sales of elephant ivory.

At the end of the 1980s, when between 700,000-1 million elephants were slaughtered for their ivory, CITES voted in 1989 to ban all trade in elephant ivory (Walsh, 2010). After a slow recovery in numbers, in 1997, pro-ivory traders pushed through a one-off sale of ivory, arguing that limited legal sales would diminish the demand for illegal ivory. However, those against such sales felt vindicated when in Tanzania alone, the percentage of elephant mortalities from poaching rose from 22% in 2003 to 62% in 2009, and the wholesale price of high-quality ivory rose from $200/kg to $850/kg in 2007, and then doubled again by 2009.

In 2007, CITES also gave Namibia, South Africa, Zimbabwe and Botswana permission to sell 110 tonnes of ivory to China and Japan; the EU agreed to support the measure on the basis that there was then a moratorium for nine years. In 2010, Zambia and Tanzania, which had not been included in the moratorium, applied for one-off sales of ivory. However, this time CITES rejected the applications, mindful of the evidence that legal sales were not, in fact, reducing the illegal demand for ivory.

The CITES programme, Monitoring the Illegal Killing of Elephants (MIKE), produced a report for CITES CoP 15 in 2010, which included the following data:

- 2000-7 baseline information: Levels of illegal killing, statistically adjusted for effort and influencing factors, were highest in central Africa (63% of carcasses), followed by eastern (57%), west (33%) and then southern Africa (19%)
- 2000-7: Levels of illegal killing in Asia were extremely low (lower than any African sub-regions) and were largely driven by human-elephant conflict

MIKE then analysed 6,566 carcasses found between 2002-9 at 66 MIKE sites in Africa and Asia:

- 2002-9: Levels of illegal killing, statistically adjusted for effort and influencing factors, were again highest in central Africa (69% of carcasses), followed by west (60%), eastern (42%), southern Africa (37%) and then Asia (17%)

Elephant poaching in the Selous Game Reserve, Tanzania

The Selous was declared a UNESCO World Heritage Site in 1982 due to the diversity of its wildlife and undisturbed wilderness area.

Save the Rhino supported an NGO working in the Selous, the Selous Rhino Trust, for about 12 years. The Selous is divided into two sections: north of the Rufiji River, which is designated for photographic tourism; and south of the Rufiji River, which is divided into hunting blocks. The Selous Rhino Trust monitored black rhinos – the Eastern subspecies (*Diceros bicornis michaeli*) – in the northern zones, estimated a total population of around 20-25 animals. In addition, they carried out occasional surveys in the south, and believed that a further 40 or so black rhinos survived, possibly of the South Central subspecies (*D. b. minor*). The Selous is also home to one of, if not the, biggest elephant populations in the world, with its important Selous-Niassa Wildlife Protection Corridor to the south leading into Mozambique (Gobush).

Since 2007, the field operations of the Selous Rhino Trust were managed by Kes and Fraser Smith, who used to work in Garamba National Park in the Democratic Republic of Congo with the Northern white rhinos (*Ceratotherium simum cottoni*). As well as ground patrols, Fraser would fly over the northern sector, looking for rhinos. However, all too often he would spot signs of poachers' camps. Usually, these would be illegal fisherman, poaching fish on a commercial scale, with barges driven up the Rufiji River from the coast. Fraser would call Tanzanian Wildlife Division rangers to move in, arrest anyone they could catch and to destroy or confiscate their assets. This air-to-ground assistance doubled the effective anti-poaching follow up by the Wildlife Division during the period of the project (Smith, K., pers. comm.).

However, Fraser also began to see, and report on, an increasing number of elephant carcasses within the Selous. MIKE's data show that Tanzania has been the source for one-third of all ivory seized between 1989 and 2010, and the Selous has been particularly hard hit by poaching:

- 2007: 103 carcasses, of which 42% were illegally killed (112 carcasses found in Tanzania)

- 2008: 90 carcasses, of which 59% were illegally killed (98 carcasses found in Tanzania)
- 2009: 73 carcasses, of which 67% were illegally killed (90 carcasses found in Tanzania)

In the northern sector of the Selous alone, there was a four-fold increase in the detection of elephant carcasses from 2007 to 2008. In terms of flying time, Fraser was seeing 0.8 elephant carcasses every 10 hours in 2007 and 3.2 carcasses per 10 hours in 2008 (Smith, K., pers. comm.).

Elephant poaching doesn't just kill elephants. Anecdotal evidence from Richard Bonham, a guide who visited the Selous regularly for many years, says that the Selous elephants have become much more wary of, and aggressive towards people, due to increased human-wildlife conflict and also suggesting contact with poachers (Bonham, R., pers. comm.). In 2009, an experienced safari guide called Anton Turner was killed by an elephant while assisting a BBC film crew in the Selous (Kisiel, 2009); and in February 2011, a professional hunter, Andre de Kock, was murdered by elephant poachers in Maswa Game Reserve, on the border of the Serengeti (Ross, 2011).

The July 2009 issue of *Scientific American* (Wasser, Clark and Laurie, 2009) carried a feature on how three seizures of ivory in 2006, totalling nearly 11 tonnes, were subjected to DNA analysis by a team from the Center for Conservation Biology at the University of Washington, working in conjunction with the University of Chicago and the Interpol Working Group on Wildlife Crime. The first seizure took place on 3 July 2006, when suspicious customs officials in Taiwan opened containers en route to the Philippines. They found ivory with an estimated wholesale value of $4.6 million or a "street value" of $21 million. The second seizure occurred on 8 July 2006, when police recovered 2.6 tonnes of elephant ivory; while the third seizure took place on 28 August 2006, in Osaka, Japan, where pieces from 260 tusks were recovered. Many of the pieces had writing in Swahili on them.

The *Scientific American* article describes how the team extracted DNA samples from the seized ivory, and then compared those with DNA samples collected from elephant dung across Africa, which had already been analysed to produce a DNA "fingerprint" of elephants at those locations. The evidence proved that the ivory seized in Taiwan and Hong Kong came from the Selous-Niassa area. The authors go on to conclude that: "Poachers were targeting specific populations for intense exploitation. Populations were hit hard and fast, presumably to satisfy specific purchase orders from suppliers. This finding contradicted the more common belief that traffickers were employing a decentralized plan of assembling large consignments by opportunistically procuring ivory stockpiles as they became available across Africa."

The authors then said: "It also meant that using these techniques to focus law enforcement on identified hotspots should prove to be a viable anti-poaching strategy." However, this was not to be. As Aidan Hartley revealed in *Unreported World* for Channel 4 in March 2010, the Tanzanian Wildlife Division, responsible for policing the Selous Game Reserve, may have been turning a blind eye to elephant poaching crisis because of political and trade relations with China. Furthermore, Fraser Smith's work permit for Tanzania was not renewed, meaning that he could not continue his work for the Selous Rhino Trust. Perhaps his reports of the number of elephant carcasses seen from the air had become too embarrassing for the authorities?

Since Kes and Fraser stopped their work in the Selous, there has been no serious rhino monitoring effort. Save the Rhino International heard that the Wildlife Division had approached another conservation NGO for funding to carry out a rhino survey. Save the Rhino and its regular partner, the International Rhino Foundation, warned that NGO not to fund the survey, as they feared that the rhinos' survival would be threatened if their whereabouts were known (pers. comm.).

Ivory smuggling in 2011

The Environmental Investigation Agency released the following information (Rice, 2011) on ivory seized between 1 January and 26 September 2011:

- 11,493kg of ivory have been seized; representing at least 1,149 elephants (based on an average of 10kg per animal)
- An additional 3,997 tusks (no weight recorded) were seized, so that's at least 1,998 elephants
- Also seized were 1,307 pieces of ivory (worked ivory including statues, chopsticks, "pieces of ivory" with no further description, etc), with no way of knowing what that represents and no weight recorded

Not counting the pieces, that's at least 3,148 dead animals. But this is only the ivory that was seized. If one reckons on a 10% detection rate, that's over 30,000 elephants killed.

The rhino poaching crisis

On 10 April 2011, Cathy Dean received an email from Ox Hacking, who works in the Save Valley Conservancy in Zimbabwe, via Natasha Anderson of the Lowveld Rhino Trust. He said: "This black rhino was found wandering around the Conservancy this week, by scouts who reported a severely wounded animal. Rangers were immediately dispatched to assess the situation and discovered that the rhino had indeed been poached. It had been shot several times and had gone down unconscious. They then cut out the horns and presumably left the animal for dead. Vets were contacted and arrived in quick time to attend this poor animal. Their decision was to try and save the animal by darting and treating it in the field. Masses of antibiotics have been administered in the hope that the wound will heal over. This is a horrendous wound, and I have my doubts. However, having said that, the animal has had a desperate fight for survival and is eating normally, so why not give him a chance. What is of concern also, is the fact that he was dehorned last year. The re-growth of his horn could only have been a fraction of what it was before dehorning, but it goes to show how desperate and determined these poachers have become." Sadly, the animal died; as have all those with such severe facial injuries that Save the Rhino has heard about.

Why have the poachers become so desperate and determined? Back in the 1970s and 1980s, most rhino horn poached in East Africa was smuggled to the Yemen, where it was carved to make ornamental handles for jambiyas, ceremonial daggers worn by men reaching adulthood. Although jambiyas can have handles made of a range of substances, such as precious metals, buffalo horn or plastic, and can be decorated with gemstones, those made of rhino horn were regarded as the "Rolex" or "Porsche" versions. That crisis was fuelled by the oil boom, when income in the Middle East enabled the rise of a new middle class able to afford luxury products.

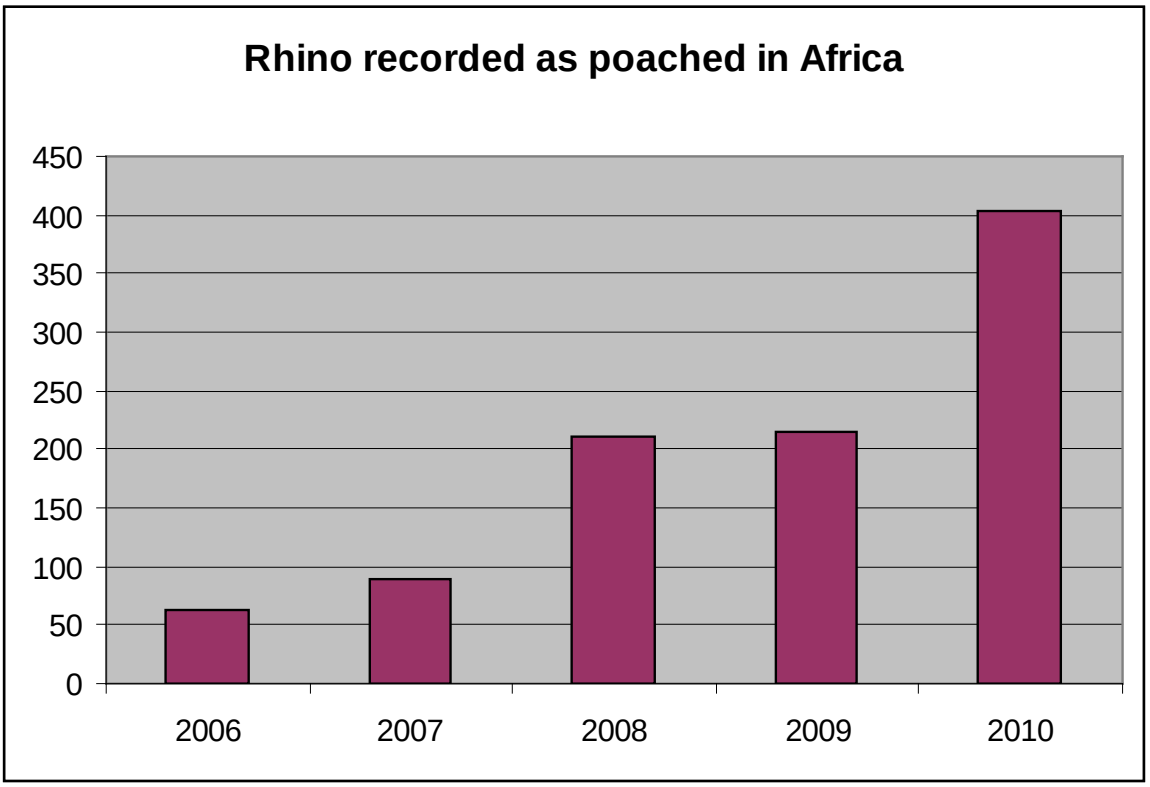
Today, the greatest threat to rhinos comes from poaching for the horn for use in Traditional Chinese Medicine (TCM). In China and Vietnam particularly, but also in other East Asian

countries, ground rhino horn is used to cure ailments such as headaches, fever, typhoid, vomiting, smallpox and arthritis. Rhino horn has been an integral component of TCM for thousands of years; yet it has no medicinal value. It is made of keratin, a protein also found in human hair and nails. However, it is a testimony to the power of tradition that millions of people believe that it does work as medicine. There is much media coverage of a story that the Vietnamese now believe that rhino horn cures cancer; though Tom Milliken of TRAFFIC has extensively researched this story and has been unable to find a definitive source for it (TRAFFIC, 2011).

At the beginning of the 20th century, best estimates for Africa's black rhino population put the figure at "several hundred thousand" animals (IUCN, 2008). Big game hunting, game clearance to make way for livestock and cultivation, and poaching all took their toll, and by 1970 it is estimated that there were only 70,000 remaining. The poaching wars of the 1970s and 1980s then took hold, and by 1992, black rhino numbers reached an all-time low of 2,410. It has taken nearly 20 years of conservation effort to double numbers to 4,880, as at the end of 2010.

Meanwhile, the Southern white rhino (*Ceratotherium simum simum*) was one of the first rhino species to be at the brink of extinction, and was thought extinct at the end of the 19th century. Both farmers and hunters had virtually exterminated the animals. Nevertheless, a few individuals (50-100) survived in the iMfolozi River valley in what is now KwaZulu-Natal in South Africa. Thanks to the co-operation of conservationists, researchers and general public, Southern white rhinos have recovered to 20,170 individuals today.

Figure 1: Rhino recorded as poached in Africa. Graph provided by Dr Richard Emslie, Scientific Officer, IUCN SSC African Rhino Specialist Group



The current poaching crisis is affecting both species. White rhino losses have been greatest in South Africa; while Zimbabwe has mainly lost black rhino.

Poaching may be linked to the growing importance of China in economic terms, and the corresponding rise in numbers of an affluent middle class, which, like the Yemenis, is able to afford luxury items. There is also much discussion of the growing Chinese footprint in Africa, with its engineering and mining contracts, and there is anecdotal evidence of poaching of all species increasing after the building of a new, tarmac road by Chinese companies. However, Save the Rhino has not seen any detailed research that correlates the presence of such companies and a rise in poaching locally.

Rhino poaching in Asia is also happening, but on a much lower level. From the beginning of 2010 to mid-September 2011, India lost 22 Greater one-horned rhinos (*Rhinoceros unicornis*), while Nepal has lost 10 over the same period (Emslie, R., pers. comm.). There are no known poaching cases of Javan and Sumatran rhinos in the last two years, apart from the case of a Javan rhino carcass found in Cat Tien National Park in Vietnam in early 2010, apparently from poisoning from a bullet wound (Poston, 2010). This was feared to have been the last Javan rhino in Vietnam, although recent information from a Park manager there suggests that rhino spoor has been found, meaning that at least one survives (Emslie, R., pers. comm.).

The first obvious signs of a rhino poaching crisis occurred in Zimbabwe, followed by South Africa. Between 2006 and 2009, these two countries accounted for 95% of illegal rhino killings. Poaching in Zimbabwe can be characterised as arising out of the breakdown of political, economic and social order in that country. By the end of 2007, poaching had reached such levels that rhino mortalities overtook rhino births, resulting in an overall decline in rhino numbers (black and white). Some proactive responses led to a slight decline in the incidence of rhino poaching, though in 2010, rhino poaching as a percentage of the population was still much higher (6.24%) than in the other big three rhino range countries, South Africa (1.6%), Namibia (0.09%) and Kenya (2.29%).

Table 1: Poaching overview in the "Big Four" rhino range countries. Table provided by Dr Richard Emslie, Scientific Officer, IUCN SSC African Rhino Specialist Group

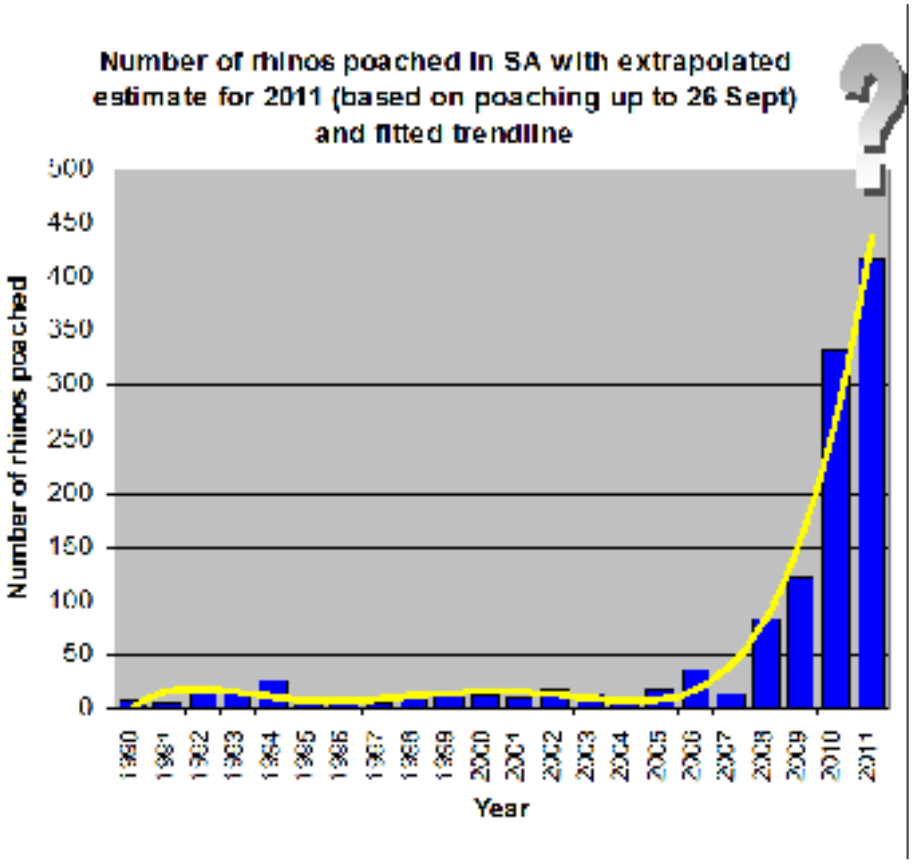
	Reported number poached 2006-2011 to date	Reported number poached 2006-2011 to date as % of 2010 rhino numbers	Reported number poached 2010	Reported number poached in 2010 as % of 2010 rhino numbers
Kenya	62	6.47%	22	2.29%
Namibia	4	0.18%	2	0.09%
South Africa	826	3.99%	333	1.61%
Zimbabwe	321	44.52%	45	6.24%

Namibia has been barely touched by rhino poaching so far, with only four cases recorded in the period 2006 to September 2011. In June 2011, the carcass of a white rhino was found at Wabi Game Lodge near to Waterberg Plateau Park, with the horns missing. Investigations subsequently showed that the animal had almost certainly died of natural causes (no bullets or injuries were found). The carcass was estimated at 3-4 months old – no access into the area had been possible during that time because of unusually heavy rains – but when the authorities checked records, they found that a lodge guide had gone missing around the same time. It seems possible that he stumbled across the carcass, was able to pull away the horns

(they come off quite easily when the animal has been dead a few days) and then disappeared to leak them into the black market (Smith, 2011).

Numerically speaking, South Africa has been hit by far the hardest by rhino poaching. 333 rhinos were killed in 2010 alone; a total of 826 (both species) in the period 2006 to September 2011. Projections for 2011 carried forward show that over 400 rhinos might be killed by the end of the year.

Figure 2: Number of rhinos poached in South Africa with extrapolated estimate for 2011 (based on poaching up to 26 September 2011) and fitted trendline. Graph provided by Dr Richard Emslie, Scientific Officer, IUCN SSC African Rhino Specialist Group



Rhino poachers

What sort of people are the rhino poachers? In 2003 and 2004, reports emerged that Sudanese horseman, also known as the Janjaweed militia, were using donkey trains to carry much greater quantities of ivory and rhino horn than they could carry on foot (Lewis, 2004). The ivory and horn came from animals killed in Garamba National Park in the Democratic Republic of Congo, and was transported north to Sudan, and exported from there. Over a two-year period, over 3,000 elephants and all but a few of Garamba's 30 or so Northern white rhinos, now extinct in the wild, were shot. There was considerable speculation at the time that the Janjaweed were poaching to raise money for weapons for their role in the conflict in Darfur, Sudan.

Fast forward eight years. When a white rhino was killed by poachers on 27 September 2011 in Royal Hlane National Park in Swaziland, Big Game Parks and the Royal Swaziland Police put out a reward for information. Following a tip off, the police shot and killed Lucky Maseko, a South African, on 28 September when he failed to give himself up for arrest. Two

accomplices were captured and have been charged. The police subsequently recovered a pair of rhino horns, two long-range firearms and 17 live rounds of ammunition – what was left after the end of the shootout. It has since emerged that Lucky Maseko was wanted by Interpol, having been suspected of at least 10 rhino poaching incidents as well as attempted murder (Tsabedze, 2011.)

However, the case that caused the greatest outcry is that of the so-called Groenewald gang, based in South Africa, arrested and charged in September 2010. A series of photographs of the gang, in court to hear the charges read out, were sent around the world on email, on Facebook, via twitter, all with the headline: "These are the faces of the rhino killers". The alleged ringleader of the gang, Dawie Groenewald, a former policeman, runs a hunting operation called Out of Africa Adventurous Safaris. The other 10 members of the gang include his wife, a professional hunter, and three wildlife veterinarians. Groenewald is accused of having simply slaughtered the rhinos that he bought at auction from Kruger National Park, selling the horns, and then burying the carcasses. This was apparently more profitable than if he'd had to pay for the upkeep expenses of live rhinos and then applied for trophy hunting permits in the normal way (Ghosh, 2010). He is currently on bail; the court case has been deferred to April 2012.

Rhino horn smuggling is not just an African or Asian problem. A British antiques dealer, Donald Allison, was caught trying to smuggle a pair of horns from the UK to China. It emerged that the horns came from a Colchester Zoo rhino that had died of natural causes; the abattoir had been doing deals on the side (BBC News, 2010). In the last two years, there have been over 20 thefts from European museums and art galleries, auction houses and zoos. Press coverage has named a traveller group in Ireland as behind the crimes, but arrests have yet to be made (O'Keeffe, 2011.) As EAZA's Executive Director, Lesley Dickie warned: "We need to be especially vigilant not only about how we securely house rhino horns used for educational purposes in our classrooms, but also the animals we nurture" (Dickie, 2011).

Factors influencing poaching

How and why has the rhino poaching epidemic become so great? One of the biggest factors is the rhino trophy hunting permit system in South Africa is deeply flawed, with inadequate policing and checks, thus opening up an avenue for "legitimate" export of trophy heads, complete with intact horns, to East Asian countries where the horns are removed and ground for use in TCM or simply showed off as prize possessions. For years it was assumed that the cost of a hunting permit outweighed the value of the rhino horn, but as demand has increased, rhinos appear to have become worth more dead than alive.

The IUCN TRAFFIC / AfRSG / AsRSG report for CITES CoP 15 (Milliken *et al*, 2009) highlights different types of malpractice, including the dramatic rise in rhino trophy hunting permit applications from Vietnam, a country with no traditional of hunting and where private gun ownership is illegal. There is a limit of one trophy hunt per year per applicant, and it seems that the criminal gangs have been paying "mules" to apply for permits on their behalf and then ship the trophy heads to Vietnam.

Probably the most brazen example of malpractice took place in March 2011, when two Thai prostitutes were recruited in Johannesburg to apply for hunting permits and then taken to a private game farm in North West Province where they were to entertain Thai tourists. The two women found themselves posing for photographs next to the carcass of a dead rhino. (Bangkok Post, 2009; Rademeyer, 2011)

Another factor that might explain the ease with which rhino horn is being smuggled out of South Africa is the history of the smuggling of other wildlife products. The marine mollusc, abalone is hardly eaten in South Africa, with 95% of legal and illegal abalone being exported to Hong Kong, China, Malaysia, Japan, Korea, the Philippines, Taiwan and Singapore, where the meat is highly prized and the shells used for ornamental purposes (Bürgener, 2010): Rising prices during the 1990s led to the establishment of organised crime syndicates which illegally exported abalone to East Asia. In one single example from August 2010, investigators from the South African Revenue Service confiscated 1.6 tonnes of abalone with an estimated value of over half a million dollars.

Having worked out how to evade the authorities, it must have been a relatively simple step to move onto other wildlife products, such as zebra hides and then ivory and horn.

It might also be argued that the demand for rhino horn has increased because of increased availability and ease of buying it within China; if an illegal substance becomes more widely available, more people are able to and want to buy it. The report produced in November 2009 for CITES CoP 15 by the IUCN Specialist Groups and TRAFFIC (Milliken *et al*, 2009) said that in 2006 and 2007, South Africa exported 61 live rhinos to China – although China reported receiving 117 rhinos over the same period, supposedly for zoological or breeding purposes.

Reporters working for *Time Magazine* published an article in July 2011, revealing that the owners of a safari park called 'Africa View', with about 60 rhinos though not open to the public, was in fact owned by a company called the Hawk Group, whose diverse business interests including arms manufacturing (Beech and Perry, 2011). A business plan, now taken down, on the company's website, discussed plans to produce various rhino horn products, with an annual sales revenue projected at $60 million. A Scientific Officer from China's CITES office told Mark Pilgrim from Chester Zoo that they use a device like a pencil sharpener attached to a vacuum cleaner to harvest the horn, without needing to anaesthetise the animal (Pilgrim, M., pers. comm.).

Some might argue that farming rhinos for their horn prevents the poaching of wild rhinos, but China's tiger farms have not prevented the continued poaching of wild tigers. Farming rhinos also perpetuates the myth that rhino horn has medicinal properties. There are also concerns that it will not be possible to meet demand with farmed material, especially if further demand is stimulated, and the likely consequence of this would be additional poaching in rhino range states.

Green hunting safaris, in which animals are darted with tranquiliser rather than shot, have long been questioned for animal welfare reasons. The Namibian reported that the Veterinary Council of Namibia had strongly condemned veterinarians involved in green hunting, pointing out the scheduled medicines such as tranquilisers should not be used for recreational purposes (The Namibian, 2011). Namibia is obviously mindful of the involvement of South African wildlife vets in rhino poaching and wants to limit the amount of drugs in circulation.

Once started, the poaching crisis has become very hard to stop, with poaching gangs often having access to better equipment than park and reserve staff (Braun, 2011). In what have been called "high-tech poaching incidents", some poachers take off in the dead of night, in small helicopters from the back of flatbed trucks parked near the target area, and then use

high-powered rifles fitted with night-vision telescopes. In other cases, crossbows have been used to fire darts – presumably, because they are quieter than traditional assault weapons that fire bullets – loaded with M99, a tranquiliser available only on licence. When the animal has gone down, the helicopter lands next to the carcass and a gang member uses a chainsaw to cut off the horns as quickly as possible, irrespective of whether the animal is still alive.

Poachers have also benefited from the spread of mobile or cell phone coverage. In Hluhluwe-iMfolozi Park in South Africa, for example, the majority of poaching cases have happened in the wilderness area in the south of the Park, where road access is – deliberately in order to preserve the wilderness experience – very limited. Poachers usually cut the fence and go into iMfolozi to look for rhinos. If and when shots are heard, back-up in the form of rangers in vehicles must drive along the perimeter fence; but a corrupt family living near the beginning of the patrol road are able to text or ring the poaching gang to give them a 3-minute warning (Swart, D., pers. comm.).

Components of a successful rhino security strategy

So what can we do to stop the poaching crisis? At the IUCN SSC African Rhino Specialist Group meeting in March 2011, Lovemore Mungwashu of the Lowveld Rhino Trust in Zimbabwe, gave a presentation on the components of a successful security plan (Mungwashu, 2011). The elements in this plan will be the same for elephant programmes as rhino programmes, and they are:

- Human resources (manpower levels and welfare issues)
- Equipment and infrastructure
- Intelligence (information management system)
- Operations command and coordination
- Communities and private stakeholders' involvement
- Monitoring (of law enforcement effort as well as rhino populations)

If, despite all these efforts, the rhino population is still being hammered, then other measures need to be considered, such as emergency translocations to remove animals and dehorning.

The most important aspect of any conservation programme is its human resources. Scouts, also called rangers or rhino monitors, need to be recruited, trained in paramilitary skills and motivated by a committed leadership. The last thing one wants is a team of skilled but disaffected trackers. Deployment densities must be guided by intelligence. It is often better to have a small back-up reaction force made with rapid response capability that can be deployed into any tricky situation to neutralise it quickly. Manpower densities will depend on threat level, with 1 man / 20km^2 being considered optimal under severe threat.

Rangers must be properly equipped, with appropriate weapons. Most poaching gangs use AK47 rifles for poaching and do not hesitate to use them against anti-poaching personnel if cornered, so it is imperative that patrols are armed appropriately to deal effectively with this threat. They need uniforms, camping and communications kit, specialist equipment like night-vision goggles, GPSs and CyberTrackers. They need vehicle and aerial support.

As well as equipment, rhino programmes need good infrastructure: a secure operations room that is well equipped with maps, computer and law enforcement database; strategically located ranger outposts or pickets; a well-maintained road network or service tracks, which facilitate easy deployments but will also save money on vehicle maintenance costs. In the

case of fenced areas, the fences must be well maintained (with vegetation cleared to prevent short-outs if electrified) to prevent incursions, to prevent animals from escaping, and to help the quick detection of any tampering with the fence.

Having a good informer network is essential. Mike Ball, Head of Security at the Malilangwe Trust in Zimbabwe, says that one week's intelligence is worth one month of patrols (Ball, M., pers. comm.). This involves running specialised intelligence databases and software, seeing up an informer reward system, scene-of-the-crime training and counter-intelligence, or the infiltration of poaching syndicates.

Namibia has launched a hotline for information about rhino poachers. At the launch, the Minister of Environment and Tourism, Netumbo Nandi-Ndaitwah, warned: "Poach a rhino in Namibia and the blood of the people will be on your hands. You will not be poaching a state rhino but will be stealing from our people, depriving whole communities of a livelihood" (Ghosh, 2010).

Getting funding for intelligence and informer networks is hard, because not many donors will be happy with the lack of auditable invoices, but it is an essential part of any rhino programme that is affected by poaching.

To tackle poaching, rhino programmes must have excellent command and coordination, with a leader who can deal with all levels of staff, who has the necessary authority to deal and coordinate with other agencies, and who has the respect of this team.

It is also vital to engage neighbouring communities and other stakeholders to get them on your side: to be your extra eyes and ears. That means involving them in decision-making as well as benefit sharing, in order to develop a sense of responsibility; running community conservation and environmental education programmes, and positive and pro-active management of human-wildlife conflict.

Finally, rhino programme managers need to monitor their own patrol effort and law enforcement activities, so that they can measure and improve on effectiveness. It is essential to know exactly how many rhinos there are in any given population. Early detection of rhino poaching activities will stop the poaching problem before it becomes too big.

Sometimes, despite having many of these components in place, it proves impossible to ensure the security of a rhino population. This happened in Bubiana, one of the Lowveld Conservancies in Zimbabwe, where approx. 90 black rhinos were translocated by the Lowveld Rhino Trust to another, safer area.

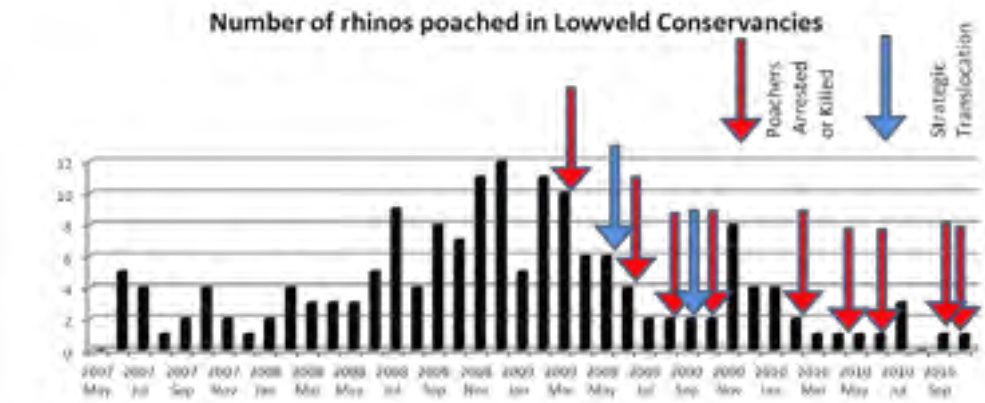
Raoul du Toit, Executive Director of the Lowveld Rhino Trust in Zimbabwe, who won the Goldman Environmental Prize for Africa in 2011, was recognised for his coordination of conservation initiatives that have helped to develop and maintain the largest remaining black rhino populations in Zimbabwe.

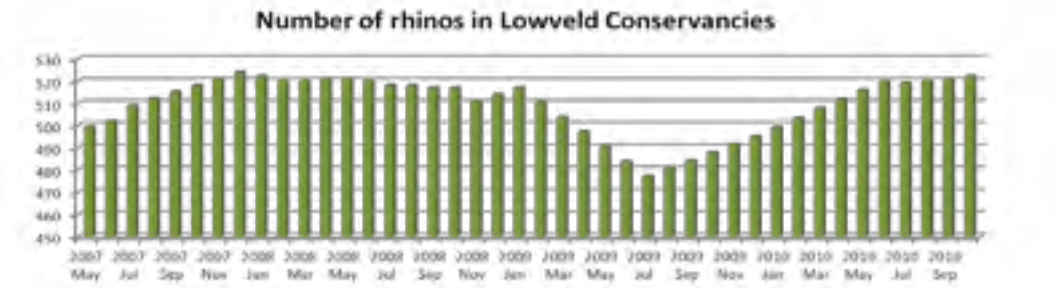
Table 2: Interventions on black and white rhinos in the Lowveld Conservancies in 2009 and 2010. Table provided by Raoul du Toit, Director, Lowveld Rhino Trust

	BLACK RHINOS							WHITE RHINOS						
	PROCEDURE							PROCEDURE						
YEAR	DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT	DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT
2009	74	31	28	29	53	4	2	9	8	1	0	0	0	0
2010	82	44	43	10	6	4	0	17	17	1	2	2	0	0

When you correlate the strategic translocations, shown by the blue arrows, and the arrest or killing of poachers, shown by the red arrows, with the Lowveld rhino population performance, you can see how the pro-active planning and reactive responses have enabled the rhino population to start increasing again from the low in July 2009.

Figure 3: Poachers arrested / killed and strategic translocations correlated with the number of rhinos in the Lowveld Conservancies. Table provided by Raoul du Toit, Director, Lowveld Rhino Trust





Doing nothing is not an option.

Political pressure and vested interests have prevented the destocking of other private conservancies and Intensive Protection Zones in Zimbabwe, with the resulting, unnecessary loss of many rhinos.

The dehorning of rhinos as a defensive measure, to reduce the reward that a poacher gets, can work, but it's not a panacea on its own: strong protection measures are still required. For rhinos with territories near perimeter fences, or those on view frequently by lodges, it can work. However it is not economically or practically possible to dehorn 100% of rhinos: it would be extremely inadvisable, for example, to anaesthetise obviously pregnant females.

Objectors say that tourists do not want to see "The Big Four and a Half"; but informal surveys suggest that tourists are not put off by a de-horning strategy, and will be understanding and supportive so long as the issue is explained. Those against also argue that dehorned females are less able to protect their young and that dehorned males may be killed by aggressive, intact males; translocations of dehorned animals should always take these factors in account.

A small survey of dehorned animals has been done in the Save Valley Conservancy, which demonstrates no significant biological impact, but a larger study is needed (du Toit, R., pers. comm.).

One of the key things is to share information between conservation programmes, so that they do not have to reinvent the wheel. The IUCN African and Asian Rhino and Elephant Specialist Group meetings are regular ways of doing these. In July 2011, Save the Rhino convened an exchange, paid for by US Fish and Wildlife Service, involving six people from

Kenya (Maasailand Preservation Trust, Kenya Wildlife Service, Lewa Wildlife Conservancy and Ol Pejeta Conservancy) and five people from Namibia (all from the Ministry of Environment and Tourism) to visit the Lowveld Rhino Trust in Zimbabwe, to discuss practical and technical issues.

Similarly, Save the Rhino hopes to get funding for a technical meeting in October 2012 in Namibia, for rhino programme managers from all the major rhino range countries, when they can discuss and compare rhino monitoring equipment, law enforcement measures and so on.

Raising awareness about the rhino poaching crisis

What else can we do to help, apart from raising or donating funds? Getting press coverage of the poaching crisis is helpful: many members of the public still don't realise how critically endangered rhinos are. This is important in the UK, Europe and USA for fundraising; but it's also important to cover the issue in the media in the rhino range countries.

Photos of the Groenewald gang in the dock, having the charges against them read out, seemed to spark a wave of outrage in the South African public. Save the Rhino received links to numerous Facebook groups and petitions against rhino poaching; radio stations have run appeals; and there were anguished emails from individuals wanting to help; with vigilante groups setting up networks of pilots ready to fly over game reserves to hunt for poachers. Not all of these offers of help are welcome: aerial surveillance in particular brings a whole host of new problems. However, it's an indication of the strength of feeling of South Africans. Pelham Jones, the chair of the Private Rhino Owners Association in South Africa, spoke for many when he said "We don't go to the east and kill their panda bears; why should they come and kill our rhinos?" (Pauw, 2010). There does seem to be a sense of national ownership of rhinos in South Africa, despite black and white rhinos being a mix of state, private and community owned.

Save the Rhino International together with its regular partner the International Rhino Foundation, has launched a joint online appeal, which aims to raise funds for the Big Four rhino range countries (Kenya, Namibia, South Africa and Zimbabwe) and to raise awareness of the rhino poaching crisis. On 22 September 2011, organisations across the world marked World Rhino Day, with protests, talks and displays. PlanetSave.com featured a round up of all the events held to mark World Rhino Day; Save the Rhino organised a small demonstration outside the Vietnamese Embassy in London (Larson, 2011).

In July 2011, the Kenyan President Mwai Kibaki, set fire to nearly five tonnes of ivory seized in Singapore. The ivory actually originated in Zambia, but was reportedly shipped via Kenya, enabling Kenya to reach an agreement with Singapore for its return. The haul included 33 tusks and over 42,000 pieces of ivory. The occasion attracted a lot of press coverage (TerraDaily, 2011), though did not make as much impact as when Richard Leakey, former Director of the Kenya Wildlife Service did the same in July 1989.

In Assam, India, there was extended discussion of the idea of burning its rhino horn stockpile, but this has not taken place. Other African rhino range states, which allow the sustainable use of wildlife, have not seriously considered destroying their horn and ivory stockpiles, despite the considerable costs of monitoring and protecting them, because of the possibility that there might, in future, be a legalised trade in rhino horn, as well as occasional one-off sales in ivory from legally killed elephants.

International efforts to combat the poaching crisis

In response to the increasing prices fetched by rhino trophy mounts at auction in the UK, the UK and other European governments have changed the law on the export of unworked horns, effectively banning the export of trophy mounts to East Asian countries (Animal Health, 2011).

In response to fears that China is farming live rhinos for horn, there is a proposal that South Africa only allow exports of live rhino to WAZA members; and that all live rhinos sold and exported must be micro-chipped in both horns (Field, D., pers. comm.).

In response to the abuses of the rhino trophy permit system in South Africa, the Environmental Affairs Minister, Edna Molewa, proposed a whole series of amendments to the rules (BuaNews online, 2011), including:

- Rhino horns obtained as a result of dehorning must be micro-chipped by the permit-issuing authority, with the details kept on provincial and national databases
- All Threatened or Protected Species (TOPS) hunting permits would ensure that all horns could be traced back to where the hunt took place
- All hunts must take place under the supervision of a conservation official, preferably an Environmental Management Inspector from the relevant province, who must immediately report back to the department on the hunt and on microchip numbers. Any export of the horn must be endorsed by the EMI
- DNA samples must be taken from rhinos whenever they are darted for translocation and treatment, as well as from horns obtained by dehorning or from natural mortalities. The DNA samples will be sent to the Onderstepoort Veterinary Genetics Laboratory

Some organisations and individuals have called for a moratorium on rhino hunting (Humane Society International, 2011), but there are good reasons why not to proceed with a ban: the danger that land currently managed as game reserves might be turned over to livestock farming or agricultural; the loss of revenue from live animal auctions held by Kruger National Park and Hluhluwe-iMfolozi Park, which generate substantial sums for park maintenance each year; and any lack of interest in acquiring rhinos could lead to Ecological Carrying Capacity being reached in some areas, thereby losing rhinos to suboptimal biological management (Endangered Wildlife Trust, 2011).

In addition, there are a number of moves to build closer working relationships with organisations in the consumer countries, such as the recent bilateral talks organised by TRAFFIC between South Africa and Vietnam government officials, which has produced a draft Memorandum of Understanding on tackling rhino poaching (Bryson, 2011).

Through Animals Asia, there are moves to build closer links between senior zoo directors in Europe and the Chinese Zoological Garden Association, to share information about guiding principles (Pilgrim, M., pers. comm.).

In July 2011, the Laikipia District in Kenya hosted a visit by senior members of the Chinese Wildlife Conservation Organisation, the Chinese CITES office, the state news agency (Xinhua) and an economist from the China Guanghua Foundation (Laikipia Wildlife Forum pers. comm.).

Finally on rhinos, the Register of Chinese Herbal Medicine in the UK, the American College of Traditional Chinese Medicine, and the Council of Colleges of Acupuncture and Oriental Medicine, have all condemned the use of rhino horn in TCM (Leggett, 2011).

In terms of progress on the elephant poaching crisis, the 61st meeting of the CITES Standing Committee, held in August 2011, resulted in the launch of a multi-donor technical trust for the implementation of an African Elephant Action Plan, agreed earlier this year. The Netherlands, Germany and France have already contributed to the new fund and other potential donors were encouraged to join them (CITES, 2011).

Further steps are needed, particularly by the governments of range states such as Kenya, where urgent reviews of the definitions and sentences for wildlife crimes such as rhino and elephant poaching are needed.

Conclusion

Every animal matters. The current rates of poaching are not sustainable, not necessarily because overall rhino or elephant numbers will begin to decline, but because of the impact that poaching can have on individual rhino and elephant populations.

Over 4,000 rhinos live on private land in South Africa. Continued expansion of rhinos' range and growth in numbers depends on new land (community and private) becoming available. Choosing to have rhinos on your land is often an economic decision by landowners, and if the liabilities outweigh the benefits, landowners could choose not to stock rhinos, thus reducing the habitat available. As with a moratorium on trophy hunting, there would be knock-on effects.

In areas with large elephant populations, the loss of a few animals may not matter. However, the killing of even one animal could make a dramatic difference in areas like the Kunene Region of Namibia. Just a month ago, a young female was found dead in the Hoarusib River in the Purros Conservancy, shot with at least two bullets. It's not clear whether she was killed by a poacher or in self-defence. This came only a few weeks after another sub-adult female was killed by Namibian Government officials, after she attacked a Spanish tourist at the Purros rest camp. Human-induced disturbance – for rhinos as well as elephants – is a major concern in the Kunene Region; particularly if it changes animal behaviour: making elephants aggressive towards people; and driving rhinos away from waterholes and the best habitat. The Kunene's desert elephant population was thought to number around 70 animals in the late 1970s, but by 2009 it was estimated to have only 14 breeding females. Conservationists fear that the deaths of these two females in the last couple of months put the future of the desert elephants in serious doubt (Smith, 2011).

We must support these wild populations: do we really want another Northern White Rhino situation?

Please get in touch if you're interested in supporting rhino conservation programmes in Africa and Asia.

Cathy Dean
Director
Save the Rhino International
E: cathy@savetherhino.org

W: www.savetherhino.org

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Back to the trenches:
The bloody battle against rhino and elephant poaching

Back to the trenches:
The bloody battle against rhino and elephant poaching


Elephant poaching crisis
SAVE THE RHINO

Ivory items for sale in East Asian shops

White gold, or blood ivory

- In the 1980s, 700,000-1 million elephants slaughtered for their ivory
- 1989: CITES voted to ban all trade in elephant ivory
- Slow recovery of numbers
- 1997: Pro-ivory traders pushed through a one-off sale of ivory, arguing that limited legal sales would diminish demand for illegal ivory
- In Tanzania alone, percentage of elephant mortalities from poaching rose from 22% in 2003 to 62% in 2009
- Wholesale price of high-quality ivory rose from $200/kg to $850/kg in 2007, and then doubled again by 2009
- 2007: CITES gave Namibia, South Africa, Zimbabwe and Botswana permission to sell 110 tonnes of ivory to China and Japan; EU agreed on the basis that there was then a moratorium for 9 years
- 2010: Zambia and Tanzania, not included in the moratorium, applied for one-off sales of ivory; CITES rejected the applications

Key findings:

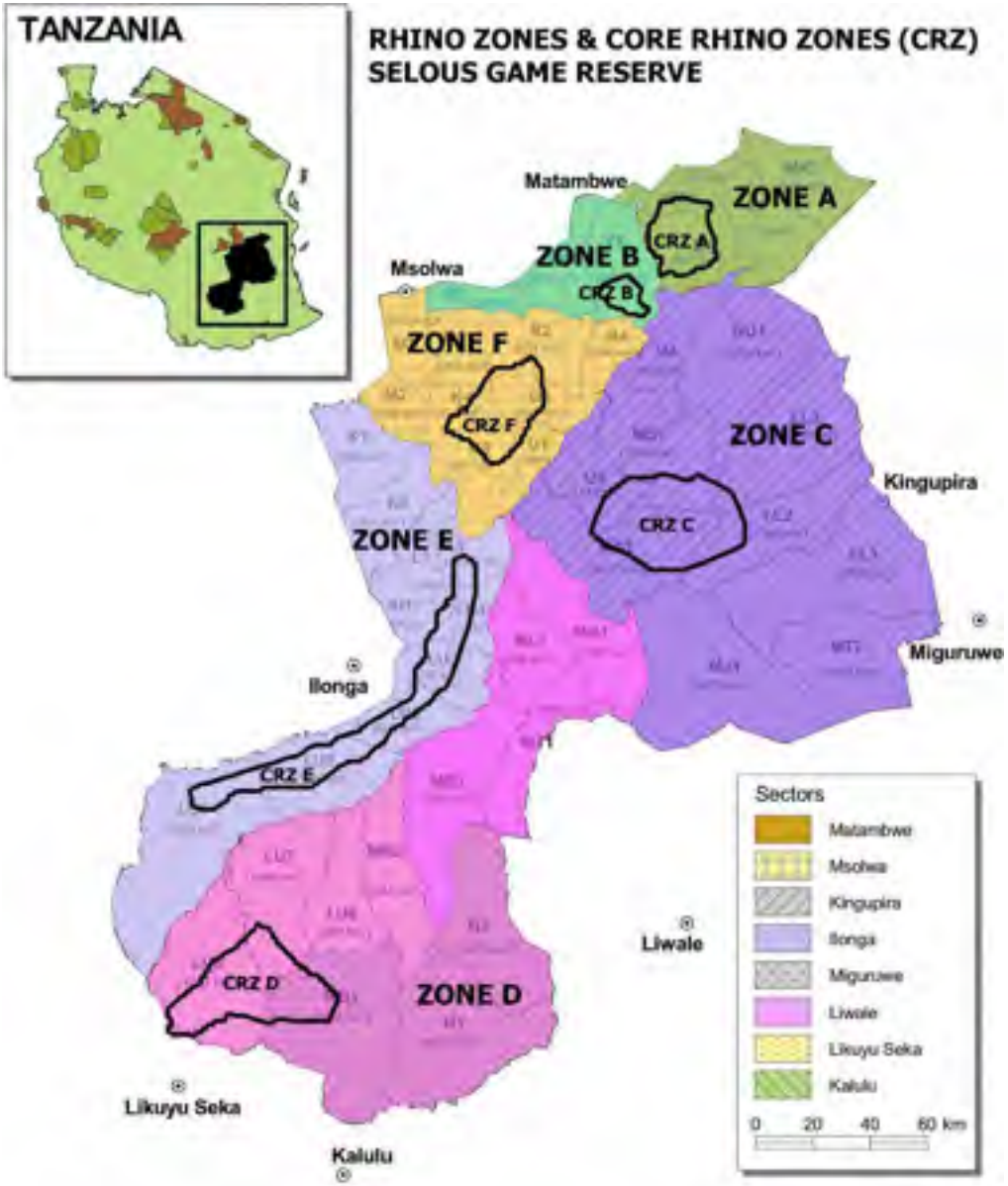
• 2000-7 baseline information: Levels of illegal killing, statistically adjusted for effort and influencing factors, were highest in central Africa (63% of carcasses), followed by eastern (57%), west (33%) and then southern Africa (19%)
• 2000-7: Levels of illegal killing in Asia were extremely low (lower than any African sub-regions) and were largely driven by human-elephant conflict

MIKE then analysed 6,566 carcasses found between 2002-9 at 66 MIKE sites in Africa and Asia:

• 2009: Levels of illegal killing, statistically adjusted for effort and influencing factors, were again highest in central Africa (69% of carcasses), followed by west (60%), eastern (42%), southern Africa (37%) and then Asia (17%)

Data from MIKE (Monitoring the Illegal Killing of Elephants) produced for CITES CoP 15 in 2010

SAVE THE RHINO



The Selous Game Reserve in Tanzania:
An important area for elephant and black rhino

SAVE THE RHINO

L to R: Kes Smith, Selous Rhino Trust; Roger Wilkinson, Chester Zoo, Fraser Smith, Selous Rhino Trust; Dave Stirling, SRI

Fraser used to spot poachers' camps almost every flight from the plane, and would guide rangers in to seize their assets

Selous Game Reserve, Tanzania:

- 2007: 103 carcasses, of which 42% were illegally killed (112 carcasses found in Tanzania)
- 2008: 90 carcasses, of which 59% were illegally killed (98 carcasses found in Tanzania)
- 2009: 73 carcasses, of which 67% were illegally killed (90 carcasses found in Tanzania)

2009: Experienced safari guide Anton Turner killed by an elephant while assisting BBC film crew in the Selous

28 Feb 2011: Professional hunter Andre de Kock murdered by elephant poachers in Maswa Game Reserve, on the border of the Serengeti

Overall, seizures of Tanzanian ivory between 1989 and 2010 represented one-third of all ivory seized internationally

Data from MIKE (Monitoring the Illegal Killing of Elephants) produced for CITES CoP 15 in 2010

SAVE THE RHINO

2006: 11 tonnes of ivory seized in Taiwan
DNA tested by the Center for Conservation Biology

University of Washington's Center for Conservation Biology:
Examined 608 tusks seized in Japan, with Swahili writing on them

SAVE THE RHINO

[TRACKING TOOL]

DNA FINGERPRINTING

Investigators can trace stolen ivory to a particular population of elephants by applying DNA fingerprinting, a technique that analyzes sequences of DNA known as microsatellites.

MICROSATELLITE BASICS

A microsatellite is a stretch of DNA made up of repeats of a short sequence of nucleotides, or code "letters."

THE REPEAT CODE

Microsatellites occur in parts of the genome that do not appear to have any function, so the number of repeats can change without affecting the health of the organism. As a result, mutations tend to accumulate quickly, and elephants from nearby populations will tend to have different microsatellite lengths. Such differences can help distinguish one population from another.

HOW IVORY IS TRACKED

Researchers create a reference map of DNA fingerprints across Africa by examining the lengths of different microsatellites from multiple individuals at known locations. Then, when an unknown ivory tusk arrives, they can compare its DNA fingerprint to the map of known DNA fingerprints to identify its approximate origin.

Collected elephant dung from all over Africa to build a DNA map,
Then extracted DNA from recovered tusks to pinpoint origin

SAVE THE RHINO

Elephant poaching in the Selous Game Reserve, Tanzania

SAVE THE RHINO

No more Selous Rhino Trust; no more rhino monitoring data from the Selous Game Reserve in Tanzania

Environmental Investigation Agency figures since 1 January 2011 (worldwide):

- 11,493kg of ivory have been seized; representing at least 1,149 elephants (based on an average of 10kg per animal)
- An additional 3,997 tusks (no weight recorded) were seized, so that's at least 1,998 elephants
- Also seized were 1,307 pieces of ivory (worked ivory including statues, chopsticks, 'pieces of ivory' with no further description, etc), with no way of knowing what that represents and no weight recorded
- This doesn't include any of the ivory known about that went through undetected – nor any of the shipments not known about. So, not counting the 'pieces', that's at least 3,148 dead animals
- If that represents 20% of what goes through undetected – although customs will always say they reckon to stop about 10% – that means …

How big is ivory smuggling in 2011?

SAVE THE RHINO

Rhino poaching crisis

SAVE THE RHINO

Rhino poaching crisis

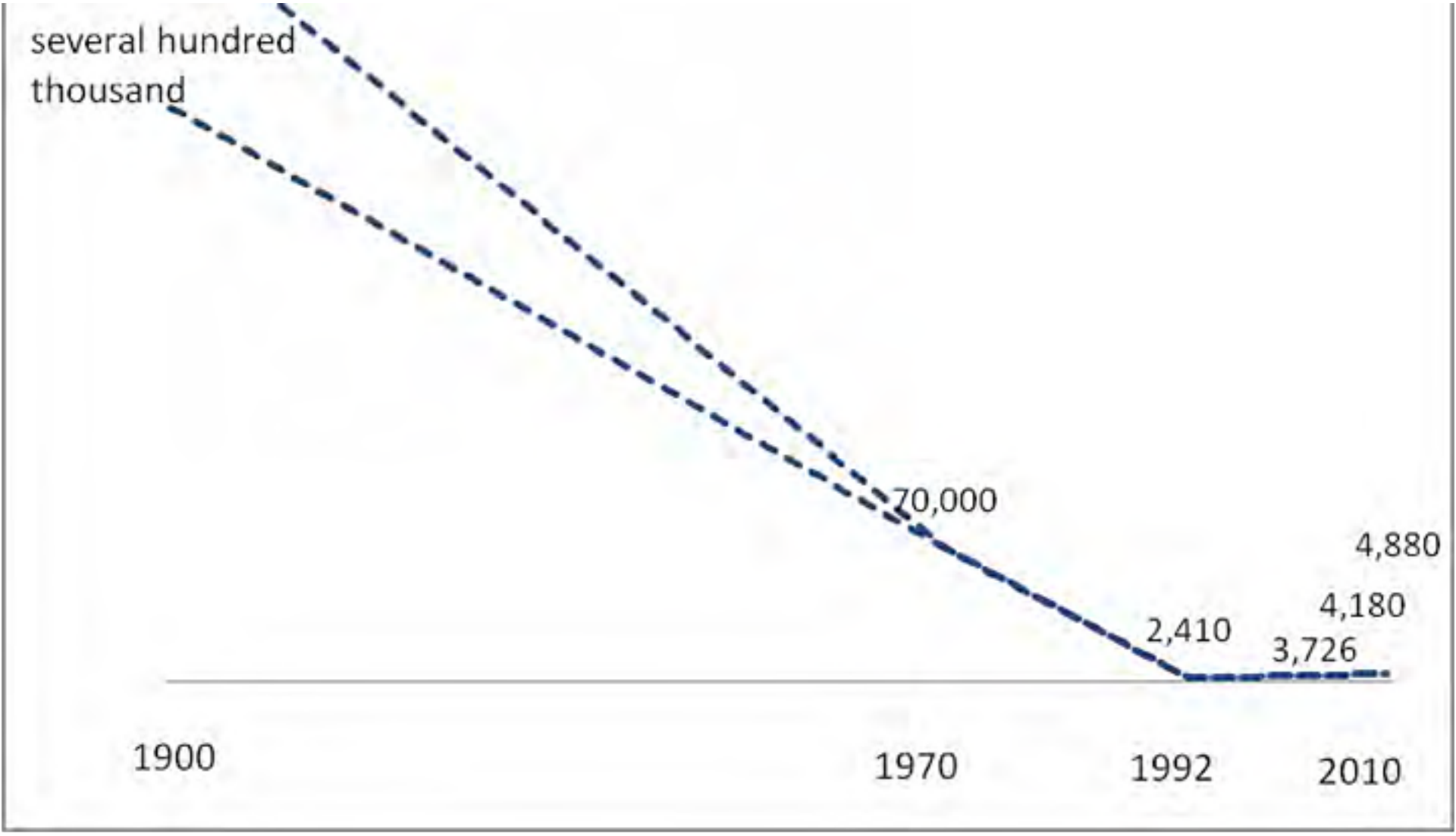
SAVE THE RHINO

Rhino horn is (was) poached for the handles of jambiyas (Yemeni daggers)

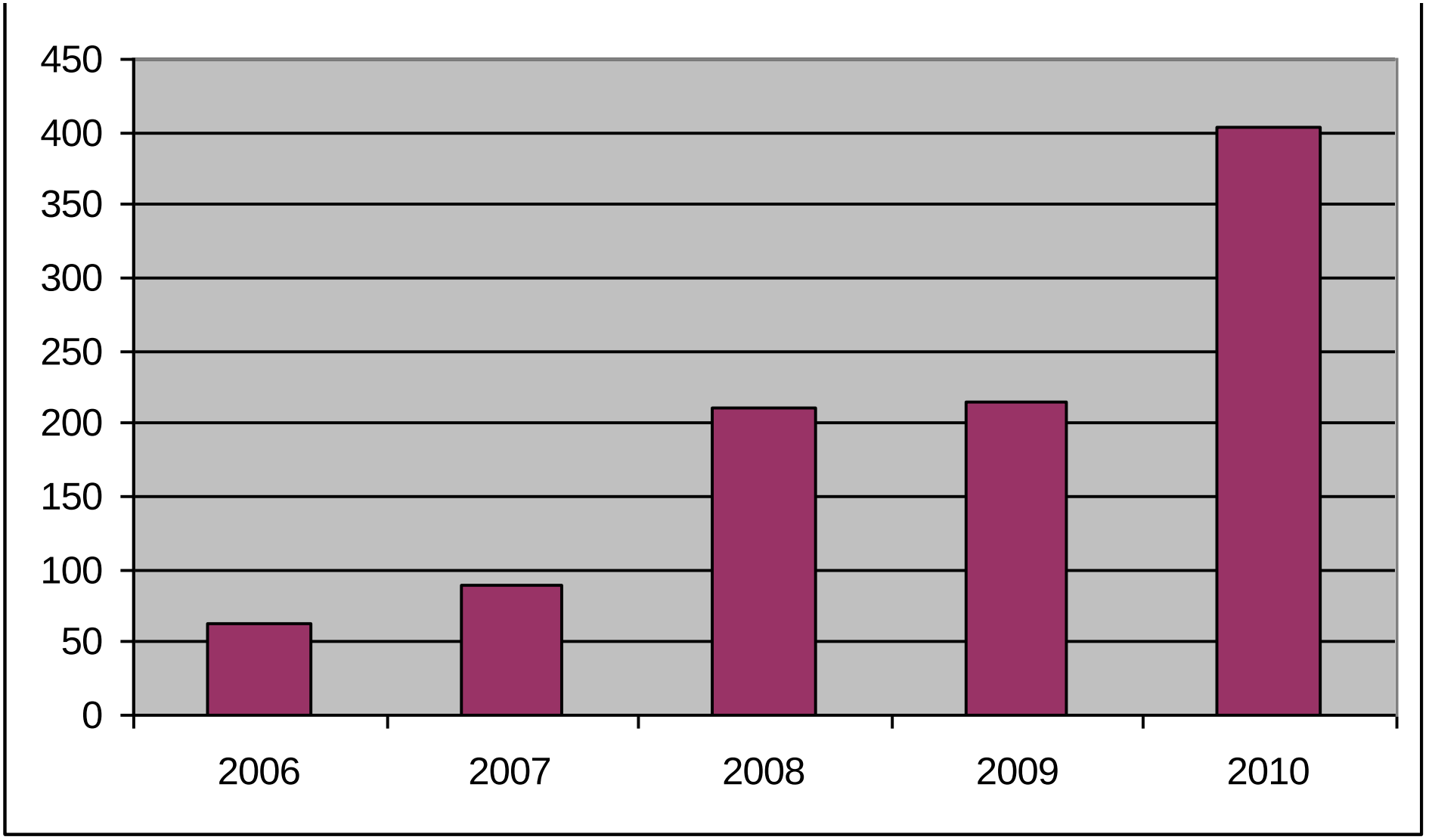
SAVE THE RHINO

Rhino horn is poached for use in Traditional Chinese Medicine

SAVE THE RHINO



Black rhino population fast decline and slow rise: 1900 to 2010



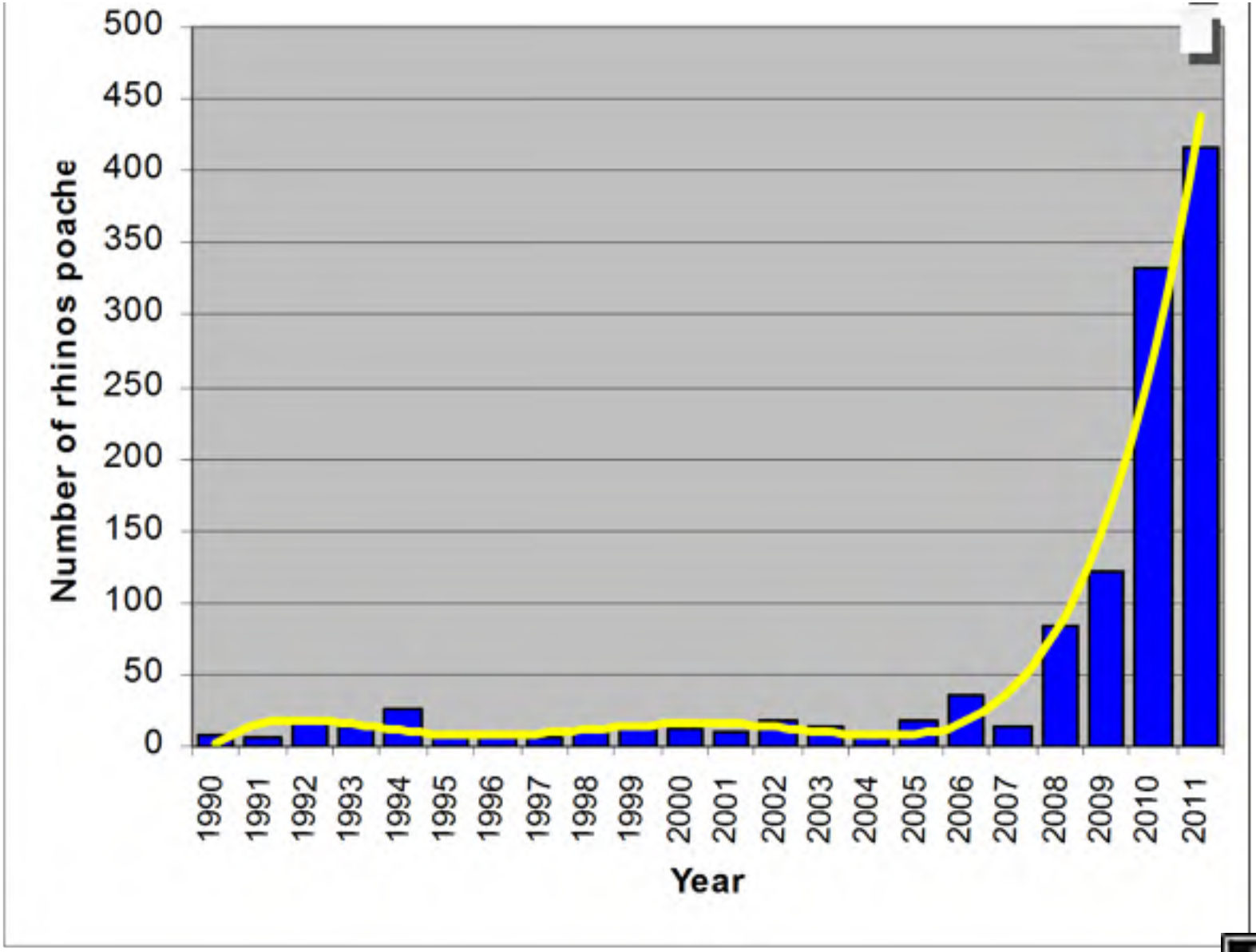
Overall rhino poaching figures for Africa

(Graph provided by Richard Emslie, 2011)

	Reported number poached 2006-2011 to date	Reported number poached 2006-2011 to date as % of 2010 rhino numbers	Reported number poached 2010	Reported number poached in 2010 as % of 2010 rhino numbers
Kenya	62	6.47%	22	2.29%
Namibia	4	0.18%	2	0.09%
South Africa	826	3.99%	333	1.61%
Zimbabwe	321	44.52%	45	6.24%

Rhino poaching in the Big Four African rhino range countries

(Table provided by Dr Richard Emslie, 2011)



Number of rhinos poached in South Africa with extrapolated estimate for 2011 (based on figures up to 26 Sept) (Dr Emslie, 2011)

SAVE THE RHINO

Poaching by the Janjaweed militia in Garamba National Park, DRC

SAVE THE RHINO

Lucky Maseko:
Rhino poacher, shot and killed in Swaziland, 28 September 2011

These are the faces of the rhino killers:
The Groenewald gang in court to face charges, Sept 2010

5 October 2010 Last updated at 17:17

Airport rhino horn smuggler jailed for 12 months

An antiques dealer who tried to smuggle rhino horns out of Manchester Airport has been jailed for 12 months.

Donald Allison, of Lancashire, hid the two horns in a sculpture as he tried to board a flight to China.

The horns, which could be worth up to £600,000, were from a rhino called Simba which died at Colchester Zoo.

They were destined for the lucrative Chinese medicine [illegible] Allison, 62, was sentenced at Manchester Crown Court.

Airport-based UK Border Agency (UKBA) officers foiled the

Donald Allison was jailed for 12 months

Rhino horn smuggling in Europe

Factors influencing poaching: Abuses of the trophy hunting permit system in South Africa

SAVE THE RHINO

Factors influencing poaching: Long history of the smuggling of wildlife products in South Africa

SAVE THE RHINO

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Killing Fields: Africa's Rhinos Under Threat

By HANNAH BEECH / BEIJING AND HANOI AND ALEX PERRY / PILANESBERG AND HARARE Monday, June 13, 2011

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Investigators dig for bullets inside a poached rhino as the manager of a South African game reserve covers his face in disgust

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Namibia: Veterinarians Ban Unethical 'Green Hunting'

6 October 2011

THE increasing method of immobilising animals with drugs during hunting was strongly condemned by Namibian veterinarians.

According to a press release by the Veterinary Council of Namibia (VCN), poachers are increasingly using drugs during illegal hunts. Particularly, the council pointed out that the worrying increase of rhino poaching in South Africa, which is often done with drugs obtained illegally from veterinarians.

The method, described as "green hunting" by the VCN could potentially migrate into Namibia, the VCN warned. They said the "risk of rhino poaching with the use of this method spilling over into Namibia is ever present. It is therefore critical that the veterinary profession of Namibia is proactive and leads by example to endeavour to prevent the potential abuse and destruction of animal populations"

According to the VCN press release, the association has declared veterinary involvement in any green hunt as "unethical".

The VCN declared that with immediate effect, the council condemns the involvement of any veterinarian who is involved in green hunts in Namibia. The VCN said veterinarians found involved in a green hunt will be regarded as unprofessional or unethical and will be

Factors influencing poaching: Green darting safaris means more immobilisation drugs in circulation

defined as the practice whereby a registered veterinarian facilitates the chemical immobilisation or anaesthesia of an animal by a

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NATIONAL GEOGRAPHIC Daily News

Monday, October 3, 2011

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News Watch

South Africa battles to save rhinos from high-tech poachers

Posted by David Braun of National Geographic June 11, 2010 Comments (2)

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The recent brazen slaying of two rhinos–a pregnant mother with her two-year-old calf–in a highly popular wildlife park on the outskirts of Johannesburg, has focused attention on the growing poaching crisis in South Africa, a country renowned for the conservation of the endangered animal.

Law-enforcement officials say they are in a battle against organized criminals arme[illegible] ian market willin[illegible] pay upward of a million U.S. dollars for a single rhino horn.

By Leon Marshall

Factors aiding poaching: Move to sophisticated, high-tech equipment

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Factors aiding poaching: Growing mobile-phone coverage

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- Human resources (manpower levels and welfare issues)
- Equipment and infrastructure
- Intelligence (information management system)
- Operations command and coordination
- Communities and private stakeholders' involvement
- Monitoring (of law enforcement effort as well as rhino populations)

And, when a population can no longer be adequately protected, pro-active interventions, including emergency translocations to remove animals and dehorning

Components of a successful security plan,
by Lovemore Mungwashu, Lowveld Rhino Trust, Zimbabwe

African rhino conservation programmes supported by Save the Rhino International

Asian rhino conservation field programmes supported by Save the Rhino International

Amnéville Zoo
Ashden Trust
BBC Wildlife Fund
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Givskud Zoo
International Rhino Foundation
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Components of a successful security plan: Human resources
Zambia: North Luangwa Conservation Programme

Components of a successful security plan: Equipment
Kenya: Chyulu Hills Game scout and rhino programme

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Components of a successful security plan: Infrastructure
Tanzania: Mkomazi Rhino Sanctuary; Zimbabwe: Malilangwe Trust

Components of a successful security plan: Intelligence
Namibia: Ministry of Environment and Tourism

Components of a successful security plan: Ops command & coord.
Zimbabwe: Raoul du Toit, Director, Lowveld Rhino Trust

Components of a successful security plan: Communities' and private stakeholders' involvement

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Monitoring Effort by Team & Major Events

2010		Patrol Effort				Patrol Events							
Team	Period	Total Days	Staff Field Days	Vehicle/donkey Km Total	Total Foot Tracking Time	Rhinos	Rhino / Day	Rhino / hr	Illegal Activities	Springs	Elephants	Lion	Cheetah
Cumulative		**263**	**1148**	**14490**	**294.5**	**392**	**1.4**	**1.3**	**1**	**76**	**44**	**32**	**0**
Northern	Q 1	21	79	1846	12	31	1.5	2.6	0	0	1	5	0
	Q2	25	106	3016	25.3	23	0.9	0.9	1	7	0	4	0
	Q3	29	134	2362	27.9	29	1.0	1.0	0	11	0	0	0
	Q4	28	115	2918	53.3	34	1.2	0.6	0	9	0	0	0
	TOTAL	**103**	**434**	**10142**	**118.5**	**117**	**1.1**	**1.0**	**1**	**27**	**1**	**9**	**0**
Camel	Q 1	31	124	na	na	67	2.2	na	0	0	0	0	0
	Q 2	20	119	661	30.5	57	2.9	1.9	0	0	0	0	0
	Q 3	34	139	0	44	48	1.4	1.1	0	0	12	10	0
	Q 4	28	117	0	34.95	41	1.5	1.2	0	14	5	1	0
	TOTAL	**113**	**499**	**661**	**109.45**	**213**	**1.9**	**1.9**	**0**	**14**	**17**	**11**	**0**

Components of a successful security plan:
Monitoring of law enforcement and rhino populations

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Strategic and emergency translocations and other interventions

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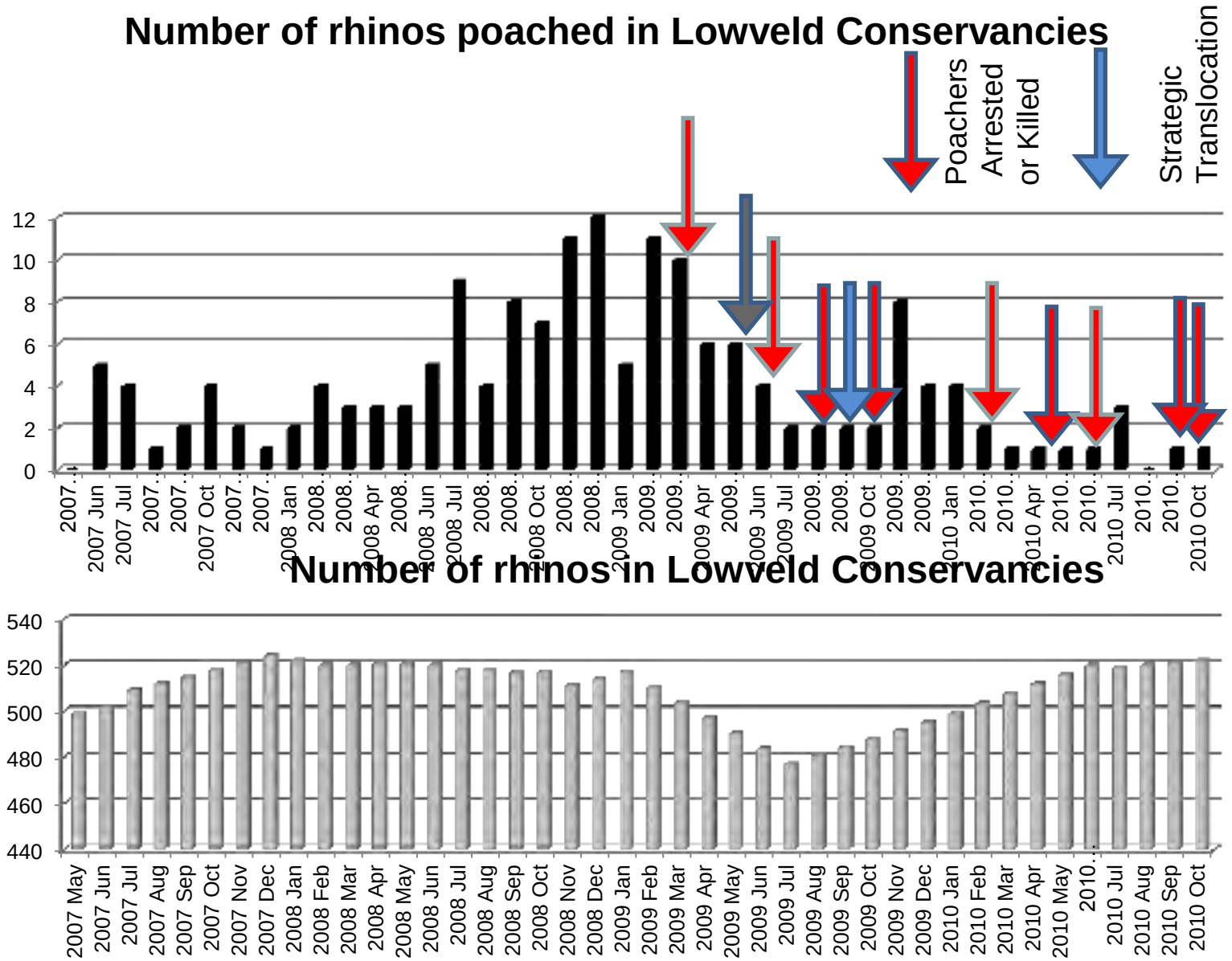
	BLACK RHINOS							WHITE RHINOS						
	PROCEDURE							PROCEDURE						
YEAR	DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT	DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT
2009	74	31	28	29	53	4	2	9	8	1	0	0	0	0
2010	82	44	43	10	6	4	0	17	17	1	2	2	0	0

Strategic and emergency translocations and other interventions: Pro-active interventions by the Lowveld Rhino Trust, Zimbabwe



Strategic and emergency translocations and other interventions: Pro-active interventions by the Lowveld Rhino Trust, Zimbabwe

Strategic and emergency translocations and other interventions: Dehorning

Exchanging information about security responses

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Rhinos in peril: gang trade in 'medicina
horn fuels massive surge in poaching
Poachers wiping out Zimbabwe's rhinos as demand surges
DIARY OF THE WEEK
FAST FORWARD TO SAVE THE RHINO
Campaigner
DASH FOR CASH
Into the wild
Let's save the Javan rhino
Scaling new heights for rhino charity
Outside
Survival is a horny issue
SAVE THE RHINO
It's not just about money: awareness raising

OPERATION STOP POACHING NOW

With our help Africa can beat wildlife crime

Dirk Swart

We are facing the worst poaching crisis in decades. Every year African field rangers risk their lives to protect rhino populations, but they are coming up against more sophisticated crime syndicates each year. These armed groups target rhino populations across Africa to feed increasing demand for rhino horn in east Asia, where it is a prized traditional remedy within Chinese medicine. More than 800 rhinos have been lost in the last three years and there is no sign of the threat abating. In South Africa alone, over 275 rhinos have been lost so far this year, as compared with "only" 13 in 2007.

Campaigns to raise awareness about the crisis and to raise funds for rhino conservation

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22 September 2011: World Rhino Day. Save the Rhino protest outside the Vietnamese Embassy, London

Kenya's responses: July 2011: Kenyan President Mwai Kibaki ignited nearly 5 tonnes of ivory (335 tusks & over 42,000 pieces) seized in Singapore

- Prevention of export of rhino horn trophy mounts from Europe
- Revised rules proposed regarding the export of live rhinos from South Africa
- Proposed new guidelines for rhino trophy hunting permits in South Africa
- Bilateral talks between South Africa and Vietnam government officials
- Animals Asia efforts to bring together zoos in China with WAZA / EAZA members
- Laikipia District hosted visit by Chinese conservation organisations
- Condemnation of the use of rhino horn in TCM by various Chinese herbal medicine organisations

- CITES Standing Committee August 2011 discussion of the elephant poaching crisis

The poaching of just one elephant or rhino can have a serious impact on populations

We cannot afford another Northern White Rhino situation

Cathy Dean
Director
Save the Rhino International
16 Winchester Walk
London
SE1 9AQ

T: +44 20 7357 7474
E: cathy@savetherhino.org
W: www.savetherhino.org

Find out how to support field programmes through Save the Rhino

Raoul du Toit, Director, Lowveld Rhino Trust
Richard Emslie, Scientific Officer, African Rhino Specialist Group
David Field, Zoological Director, Zoological Society of London
International Elephant Foundation
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Lovemore Mungwashu, Lowveld Rhino Trust
Mark Pilgrim, Director General, Chester Zoo
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