

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Forty-second meeting of the Standing Committee
Lisbon (Portugal), 28 September-1 October 1999

Issues relating to species

Tiger

TECHNICAL MISSIONS

1. This document has been prepared by the CITES Tiger Missions Technical Team. It incorporates general observations noted by the Team during its missions to 14 range and consumer States. Separate sections address the situation in each State. Recommendations relating to international strategies have been made.
2. Each of the Parties visited by the Team was supplied with a draft copy of the respective section relating to that State. Any substantive responses to the draft have been included in Annex 1.
3. Due to the length of the document, a comprehensive table of contents has been provided.

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INTRODUCTION

It is estimated that in the 1800s over 100,000 tigers roamed a variety of habitats in Asia. By 1997, when the 10th meeting of CITES was held in Harare, Zimbabwe, numbers had dropped dramatically to a level where many scientists and conservationists were pessimistic about the species long-term future. Current estimates place the total population of tigers in the wild somewhere between 5,000 and 7,000.

Whilst population sizes remain in some doubt, what is widely accepted is that the Bali (*Panthera tigris balica*), Caspian (*P. t. virgata*) and Javan (*P. t. sondaica*) sub-species are now extinct. Occasional reports are received from within range States that some of these have been seen but no scientific evidence exists to counter the thinking that those distinctive sub-species have vanished. Of the original eight subspecies that some taxonomists have agreed upon, only the Bengal or Indian (*P. t. tigris*), Indo-Chinese (*P. t. corbetti*), Siberian or Amur (*P. t. altaica*), South China (*P. t. amoyensis*) and Sumatran (*P. t. sumatrae*) tigers continue to inhabit their natural territories.

Ironically, the tiger is a species that breeds well and relatively easily in captivity but wild populations have gradually been reduced through loss of their habitat (and often also their prey) together with a dreadful record of persecution. That persecution is, to an extent, understandable. The tiger is a dangerous creature that poses considerable hazard to humans and to their livestock. Consequently, substantial numbers of animals have been killed, legally and illegally, through what is often described as 'problem animal control'.

Live tigers, particularly cubs, are sometimes found in the illegal exotic pet trade.

For decades, the tiger was also a prized target for big game hunters and many thousands ended up as trophies. Hunting of tigers is now illegal in all range States.

Wild tigers have also been killed for their skins and for use in the preparation of traditional medicine. It is these latter two aspects that are of primary concern and of relevance to CITES and that have attracted considerable discussion during meetings of the Conference of the Parties.

The 10th such meeting decided upon practical steps to address the situation.

Decision 10.66 b) required that the Standing Committee should, in consultation with interested Parties and where appropriate, undertake technical and political missions to tiger range and consumer States, to assist in developing strategies for improving control of tiger trade and related activities. The CITES Secretariat was asked by the Chairman of the Standing Committee to co-ordinate the technical missions. The Acting Head of the Secretariat's Enforcement Assistance Unit led the team and was assisted by staff of the TRAFFIC Network. Environment Canada agreed to provide further support in the loan of members of their wildlife enforcement division.

The following range States were asked to co-operate by welcoming the technical team to their country; Cambodia, China, India, Indonesia, Malaysia, Myanmar, Nepal, the Russian Federation and Viet Nam. The following consumer States were also asked to accept a visit by the team; Canada, Japan, the Netherlands, the United Kingdom and the United States of America.

Parties to be visited were chosen in recognition of their history of trade, the importance of their wild populations of tigers and information on involvement in ongoing illicit trade already known to the Secretariat or notified to it by a wide range of agencies, including non-governmental organizations (NGOs). The Secretariat also made use of data collated by the Global Tiger Forum.

The Secretariat contacted each of the Parties concerned and sought invitations for the technical team to visit. Each Party was supplied with a copy of the terms of reference for the team and asked to formulate a programme that would enable the team to achieve its goals in those countries. The Secretariat deliberately avoided prescribing programmes so as to allow local knowledge to shape and direct the missions.

In advance of the missions, several of the NGOs most active in tiger conservation were advised of the team's remit and invited to submit information or evidence that might assist.

At the time of the missions, the United Kingdom held the chair of the CITES Standing Committee. Through its Foreign and Commonwealth Office, the United Kingdom Government contacted the various range and consumer States and helped smooth the path for the team. Its Embassies and High Commission abroad also assisted in identifying persons and organizations that were involved in tiger issues at local levels. A number of British Embassies and High Commissions hosted receptions that allowed the team to meet with a variety of individuals and organizations that had an interest in the missions and could contribute to its research. The team is indebted to those Embassies and found such events extremely useful.

A list, by country, of the persons whom the team formally consulted is provided. The technical team members apologize should any persons or organization have been omitted. The team also wishes to express its sincere appreciation to all the people who assisted in its work and who willingly gave of their time and expertise. The team has deliberately avoided attributing information relating to illicit activities to any one person or department. It also recognized the anonymity requested by persons who contacted the technical team before, during and after the missions.

Owing to restrictions on its time in each State, and a lack of statistical and other evidence, the team was unable to assess each item of information it received. It has, however, attempted to record what it either observed for itself, or learned from people whom the team regarded as knowledgeable and reliable sources of information, in a manner that it believes will assist in fulfilling the requirements of Decision 10.66 b) and its terms of reference. To that end, the team sought, wherever possible, to speak with front-line operational staff and field researchers, as well as senior officials, and to visit tiger habitats in range States.

The terms of reference for the technical team were as follows.

Terms of Reference for Technical Missions

Pursuant to Resolution Conf. 9.23 (Rev.) and Decision 10.66 b), at its 40th meeting (London, March 1998) the Standing Committee agreed to technical and political missions to tiger range and consumer States. Appropriate individuals will undertake the technical missions. Their report(s) will, thereafter, be used by the political missions in their visits to range and consumer States.

The following considerations will form guidelines for the Technical Team. The team should, however, have the flexibility to pursue lines of enquiry that emerge during the course of such missions if it can reasonably be expected that the principle aim of the mission can be better achieved. If necessary, additional guidance will be sought from either the Secretary General of CITES or Standing Committee Chairman.

1. The principle aim of the missions will be to assist in developing strategies for improving control of tiger trade and related activities.
2. The team will consist of a professional member of the CITES Secretariat's Enforcement Assistance Unit, a professional law enforcement officer from a CITES Party and a staff member of TRAFFIC International with prior knowledge of the tiger trade.
3. The team will identify examples of effective legislation to conserve tigers and control the trade in tiger products and derivatives and associated trade in other Appendix I species and report upon these in a manner that may facilitate the dissemination of that information to relevant Parties.
4. The team will identify examples of effective practical control of trade in tigers and associated trade in other Appendix I species and report upon these in a manner that may facilitate the dissemination of that information to relevant Parties.

5. The team will identify examples of effective anti-poaching and other enforcement actions and report upon these in a manner that may facilitate the dissemination of that information to relevant Parties.
6. The team will identify examples, within range States, of effective public education and awareness initiatives that have assisted in reducing persecution of tiger species and report upon these in a manner that may facilitate the dissemination of that information to relevant Parties.
7. The team will identify examples, within consumer States, of effective public education and awareness initiatives that have assisted in reducing the demand for tiger products or derivatives and report upon these in a manner that may facilitate the dissemination of that information to relevant Parties.
8. The team will identify, within range and consumer States, aspects of conservation and control of trade that would benefit from improvement and report upon these in a manner that may facilitate the dissemination of that information to the relevant Party and to other Parties.
9. The team will be expected, during the course of missions, and as appropriate, to consult widely with national CITES Management Authorities, Scientific Authorities and law enforcement agencies. Where possible, the team will make contact with traders and consumers, including suppliers, practitioners and users of traditional medicine. The team, with advice from the relevant Management Authority, may also consult, or obtain information from, any other relevant organization or individual in that range or consumer State.
10. Pursuant to Resolution Conf. 9.13 (Rev.), consultation will be made with the Global Tiger Forum.
11. The mission report(s) will be submitted, if practical, to the next meeting of the Standing Committee and, in any case, prior to the next Conference of the Parties.

In preparing the report of their missions, the technical team reviewed each of the Parties visited under five headings; Tiger Conservation Issues; Legislation; Practical Controls; Education and Awareness; Aspects for Improvement. The team recognizes that its remarks within the Aspects for Improvement sections might be interpreted as criticism of a Party's approach to law enforcement or conservation. That was not the intention. Rather, the team sought to compare what was taking place within range and consumer States against what seems to be best practice among the international approaches to stopping illicit tiger trade. Comments of a more global or regional nature have been incorporated separately. Matters of particular significance or interest have been highlighted by the use of **bold** type.

The team met with many people who provided supplementary information, primarily relating to conservation aspects, especially habitat loss. Whilst the team took account of biodiversity factors in general terms, it wishes to emphasise that its remit related to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Consequently, some individuals contacted by the team may feel that their concerns have not been sufficiently recorded. The team did, however, value their contributions, which provided it with a better overview of the subject.

In a review of the activities by, and within, 14 CITES Parties, a substantial amount of information and literature was collected by the technical team. The team's report seeks only to summarize that information. Persons or organizations interested in obtaining further details on any specific matters are invited to contact the CITES Secretariat.

The launch of the Technical Tiger Missions

In its role as Chairman of the Standing Committee and the first State to be visited by the team, the United Kingdom hosted a ceremony at London Zoo on 20 January 1999 to launch the missions formally. In attendance were representatives from many of the embassies of the range and consumer States that the team would later visit. The United Kingdom's Environment Minister, Michael Meacher MP, formally launched the missions and Derek Fatchet MP from the United Kingdom's Foreign and

Commonwealth Office also expressed the government's support. It was with considerable shock that the team learned that Mr Fatchet had died suddenly several weeks later.

The subsequent press conference was used to display an educational poster produced by the United Kingdom for distribution by the CITES Secretariat. The poster, using the three working languages of the Convention, has Chinese text encouraging traditional medicine consumers to use products that offer an alternative to tiger parts and derivatives.

A number of NGOs attended the launch and press conference and described it as the wildlife event that had attracted probably the most media attention ever seen in the United Kingdom. The missions gained widespread coverage in newspapers, and on radio and television, both in the United Kingdom and abroad. Less than a week later, the team saw the event reported in a Vietnamese language daily newspaper in Los Angeles. The team subsequently gave interviews to many local and international media representatives during visits to States and felt that this publicity, in itself, helped further the basic aim of the missions by raising awareness of the subject.

The amount of attention undoubtedly reflected the general public concern and interest in wildlife conservation and particularly in what many regard as a flagship species.

Trade in Tiger Specimens

It has been recognized that parts and derivatives of tigers have featured for centuries in some traditional medicine products. The skins of the animals are also highly prized for decorative purposes and as symbols of power.

The forms of medicine that make use of tiger, and other CITES-listed species, are many and varied. 'Traditional Chinese Medicine' is often used as an umbrella phrase to describe an aspect of what the Western world thinks of as 'alternative' medicine. The team encountered practitioners who felt this term correct since they argue that many of the other forms of traditional medicine have their origins in ancient China.

This report avoids using this term since it appears to exclude, for example, the Vietnamese, Cambodian, Tibetan and many other traditional medicines that also use endangered species in their products. Use of the term 'Traditional Chinese Medicine' also places too much focus upon one country or race. As will be seen, use of traditional medicine is by no means restricted to certain ethnic groupings.

Consequently, the report will refer simply to traditional medicine (TM) except where a separate distinction is required.

THE MARKETS FOR ILLEGALLY OBTAINED TIGERS AND TIGER PARTS

There can be no doubt that poachers target tigers. What happens thereafter to the animals, their carcasses, and/or parts of them, was of particular interest to the technical team and considerable attention was given to this subject.

There are both apocryphal reports and real evidence to show that tigers, tiger skins, skeletal parts and other body parts, especially the penis, are in demand for a number of reasons. These include decoration, traditional medicine, power, luck and status symbols, use in virility preparations and, to a lesser extent, live animals (especially cubs) as exotic pets.

The number of products purporting to contain tiger ingredients that are seized by enforcement officials each year, if taken as an indication of overall demand, would, in itself, lead one to the logical conclusion that wild populations simply could not sustain such levels of illicit activity. Indeed, extrapolation would lead to the not unreasonable conclusion that the species could, in fact, have been exploited into extinction by now.

That subspecies of tiger remain, and continue to be poached, must raise questions as to what is actually happening; where illegally killed tigers and their parts are really going; how many tiger skins being offered for sale are genuine; how many products claiming tiger as an ingredient actually contain tiger parts?

The answers to these questions should be of considerable importance to enforcement officers. Not only would they provide information that would enable effective targeting of illicit trade routes, they ought also to help avoid wasted effort in seizures of products that are either fake or do not contain tiger parts and derivatives. Given the limited enforcement resources, both in range and consumer States, accurate information on this subject should enable responses to be prioritized.

The team was unable to identify any State that claims to have developed a reliable technique to test for the presence of tiger parts or derivatives in TM products or virility preparations. Morphological identification of tiger skeletal parts is, in itself, extremely difficult, as the species is so similar to the lion. Whilst DNA profiling can positively distinguish tiger DNA from that of other felidae, it has yet to be determined whether the preparation processes in TM products eradicate the DNA 'fingerprints' that might otherwise be located and identified.

The team learned that, historically, incorporating tiger bone(s) into TM products has often involved placing a bone into a jar of alcohol and allowing it to dissolve into the surrounding liquid over a period of several weeks. Alternatively, bones would be boiled in water or oil until a glue-like consistency was achieved. In Japan, virility preparations recommend the leaving of a tiger penis in an alcohol mixture, in something of a distillation process. Such approaches may very well eradicate any opportunity to detect, scientifically, the presence of tiger ingredients.

The team took account of the work done by the forensic laboratory of the U.S. Fish and Wildlife Service, whose attempts to identify the presence of calcium, considered to be a detectable element within any product purporting to contain tiger 'bone', proved unsuccessful during their examination of substantial numbers of products seized by the Service's enforcement staff.

The team also considered the vastly differing prices of products claiming to contain tiger that were seen during the course of its missions. The relatively high price of tiger penises on sale, for example in Japan, was one indicator that prospective purchasers might be being offered the genuine article. Their physical appearance also confirmed the likelihood of their being genuine.

The price and appearance of skins on sale in markets in Phnom Penh similarly indicated that a buyer would obtain the real thing. Yet, within shops in the same markets, the team saw 'tiger bone plasters' which were so cheap that the likelihood of tiger being a genuine ingredient seemed highly remote. The low price did not appear to equate with the supposed difficulty in obtaining the ingredient. The plasters were also cheaper than those on sale in Malaysia that the team was assured did not contain tiger parts.

The team believes that the apparent continuing use, by some manufacturers, of the word 'tiger' either in the product title, description or list of ingredients and pictures of the species on packaging is leading to considerable confusion that may, on occasions, result in unwarranted or unnecessary enforcement action. Specimens contained in such packaging do, of course, fall within the definition of readily recognizable recommended in Resolution Conf. 9.6 and TM traders require to be alerted to this. Whilst the team believes that the domestic law of all Parties should take account of that definition, it is wary that overly enthusiastic and rigid or inflexible enforcement may lead to the truly important illicit trade of genuine tiger parts and derivatives being missed.

The team is of the opinion that the interception and seizure of tiger specimens considered as readily recognizable within the definition in Resolution Conf. 9.6 is important in terms of combating illicit trade in endangered species but believes that enforcement efforts should also be targeted, as much as possible, towards the genuine article, particularly with regard to follow-up actions. To enable this to be done, the team **recommends** that efforts continue to be made to develop techniques that will distinguish the presence of tiger ingredients in traded products.

The above remarks aside, the team believes that very specific markets exist for the genuine article, be that skins, bones or other tiger parts or derivatives. It is of the opinion that what takes place mimics the illegal narcotic trades. Just as some buyers will insist upon being supplied with cannabis from a particular producing State, the team believes that sufficient evidence exists to reasonably justify suspicion that tiger parts are being purchased by 'specialists' who have customers who will pay substantial sums to guarantee receiving, for example, TM products that truly contain tiger bone.

The team is of the opinion that a market for tiger penises clearly exists in Japan in relation to virility products and that the supply to meet that demand **requires** investigation.

As a result of its research, the team believes that there is sufficient justification to suspect that organized routes exist to dispose of illegally obtained tiger parts and that distinct routes may be used to smuggle particular parts of poached tigers. Whilst that may not apply to every illegally killed tiger, it seems likely that a significant number enter such criminal routes. Intelligence quoted to the team appeared to more than justify suspicions that organized criminal gangs, including the Russian Mafia and Chinese Triads may well be involved in wildlife crime. Although several enforcement agencies told the team of their concern over the existence of such organized trade and routes, little appears to have been done to research or infiltrate illicit criminal activity at that level. The team acknowledges that the lack of specialist wildlife crime units in Asia severely restricts the ability to tackle this aspect of trade but is strongly of the opinion that such research and infiltration is necessary if any significant progress is to be made.

The team **recommends** that such enforcement activities are undertaken as a matter of priority and that agencies who have experience in this type of work should make advice and, where appropriate, practical assistance available. The team further **recommends** that such assistance should also cover the subject of intensive and thorough interrogation of persons apprehended poaching, smuggling and trading in tiger and other endangered species. It appeared that relatively little intelligence is gathered in this fashion in range States.

Overall, during the course of its missions, the technical team was assured by most TM practitioners and pharmacists it spoke to that tiger was not an essential ingredient in the treatment of illnesses and that alternative ingredients already exist. The only exception to this was in China where representatives of the nation's major TM manufacturer indicated that they felt tiger was an important part of efficacious products. The demand for TM products containing tiger ingredients demonstrates that many potential customers in range and consumer States share that opinion, even if such beliefs mainly result from traditional and/or cultural views and not from any scientific evidence of the products being efficacious.

The team noted that scientific research has been conducted into the efficacy, for example, of rhinoceros horn and bear bile in traditional medicines but that relatively little work has been carried out with regard to tiger. It **recommends** that this gap be filled at an early stage, particularly as the results might aid education and awareness campaigns; either by showing products to merely act as placebos or by aiding in the search for alternatives.

The team welcomes the work that has been done, for example in India, to distinguish genuine tiger skins from fraudulent products and **recommends** that guidance on this subject be widely publicised.

TRADE IN SPECIMENS OF TIBETAN ANTELOPE

Regarded by some officials and NGOs as still relatively little understood within CITES, it is suggested by the team that this illicit trade warrants closer attention.

The team does, however, **commend** Switzerland for withdrawing its reservation on the species.

Shahtoosh is the wool of the Tibetan antelope or Chiru (*Pantholops hodgsonii*). The species is listed in Appendix I of the Convention and hunting of the animals is banned in its range States. Primarily found on the Qinghai-Tibetan plateau of China, this species has a coat of exceptionally fine wool that protects it from the harsh cold of its habitat. It is believed that a small population may also be present in India. The wool of the Chiru is highly prized as a fashion accessory after it has been spun and made into one of the lightest and most expensive wool shawls available.

The Metropolitan Police in London, United Kingdom, discovered the value of the product during raids in 1997 when shawls, priced at over GBP 9,000 each, were seized. Demand for the shawls appears to be particularly prevalent in Western Europe, although significant seizures of over USD 500,000 have also been made in Hong Kong and the product is also believed to be on sale in the United States of America. Other countries in Asia appear to be emerging markets.

A shawl's outward appearance is not particularly distinctive to the untrained eye, but its texture is unique. This fact, coupled with the remote terrain in which the Chiru lives, makes enforcement action against the shahtoosh trade difficult.

Despite claims by traders in northern India that the wool they use is collected, after having been shed by the antelopes, evidence suggests that these animals are killed on a substantial scale for the wool.

It appears that the majority of shahtoosh wool is smuggled into India through Himalayan passes; with all the control difficulties that habitat presents. It then apparently moves to the State of Jammu and Kashmir where traditional craftsmen have the skills to process the raw product into shawls. The team was told that the State of Jammu and Kashmir has wildlife legislation that differs from the rest of India and that trade in shahtoosh remains lawful there, if conducted under a licence issued by States authorities. It is unclear whether any such licenses have been issued or not.

Team members discovered shahtoosh shawls on sale in a shop in central Kathmandu, priced at USD 1,000 each. The shop assistant maintained that the shawls had been woven locally. It is generally thought that the production of shahtoosh is restricted to a number of families in Kashmir who have developed the necessary skills over generations. There is, however, a strong tradition of weaving in Nepal and the team spoke to some individuals who believe that the skills may exist there to enable the production of shahtoosh shawls.

In New Delhi, the team found shahtoosh shawls for sale in a number of premises in the shopping arcades of five-star hotels. Prices ranged from USD 450 to USD 1,400. The latter was for a pure white shawl. The shopkeeper told team members that white wool was very difficult to obtain; most wool is naturally shades of brown and is either sold like that or dyed and sold in a range of other colours. Although none of the shops had shahtoosh shawls on open display, examples were presented for inspection as soon as the team expressed an interest in that product.

In one shop, the staff appeared much more nervous when asked if shahtoosh could be bought there and explained that, whilst they did not keep stocks on the premises, they were willing to take a team member elsewhere to examine samples. The offer was refused.

From the demeanour of the various shop assistants, the team could tell that they realized that they were engaging in an illegal activity. The team found that staff in some other nearby premises in the same arcades, also selling shawls, told members that the sale of shahtoosh was illegal.

Although team members did not identify themselves as part of a CITES mission, neither did they engage in any elaborate deception. Shop staff seemed only too willing to try and sell to persons who they obviously thought were tourists. The team is confident that a similar approach by appropriate personnel should produce successful enforcement action. It also observed that some of the shops visited appeared to have extensive stocks of shawls. In one shop, the stocks included woven shahtoosh that had yet to be cut into shawls and were of a size that, once divided, would have made three shawls. Another shop had smaller cuts, in sizes suitable for scarves, and these were priced at USD 250.

The Commissioner of Customs for Indira Gandhi International Airport, New Delhi, told the team that her staff had made several seizures of shahtoosh from passengers attempting to smuggle shawls out of the country in their hand luggage. Her officers had noted that such people were often of a high status or caste and that some persons had subsequently attempted to bring pressure to bear to have prosecution action against them stopped.

There are clearly substantial profits to be made from the illicit trade in shahtoosh. Indeed, the successful smuggling of just one shawl from New Delhi to London, and subsequent sale, could more than cover the price of the air fare between the two cities. The characteristics of the product allow for easy concealment of considerable numbers of shawls by even one person.

During its mission in India and Nepal, the team asked officials whether evidence existed to confirm apocryphal reports that shahtoosh is bartered by traders from China in exchange for parts and derivatives of tiger from Indian or Nepalese traders. In a similar vein, the team wondered whether reports that shahtoosh or tiger parts were bartered for weapons were true. Whilst most officials agreed that the trade routes between China and India (commonly via Nepal) for all these illicit goods were probably the same, they did not have evidence to confirm or deny rumours relating to bartering. The team hopes that the investigations planned by WWF Nepal may shed more light on this subject.

During its mission in China, the team heard of the hazards faced by enforcement personnel who have attempted, with some significant successes, to combat the illicit trade. Police officers have suffered from altitude sickness during operations in the Chiru's habitat and illegal hunters have killed at least two officials. Poachers use a variety of firearms, including automatic and semi-automatic weapons, to shoot the animals.

Team members have subsequently seen leaflets produced by the Metropolitan Police, London, United Kingdom, which will be used in their area to raise awareness of this illicit trade in a campaign that will be launched in London in late 1999.

It is believed that the horns of *Pantholops hodgsonii* have been used in TM products but the extent of current demand has not been quantified.

The CITES Secretariat is currently organizing a workshop to discuss the Tibetan antelope and develop strategies to combat illicit trade in its wool in the autumn of 1999, bringing together range, producer and consumer States.

GENERAL OBSERVATIONS BY THE TECHNICAL TEAM

In this section, the team seeks to raise a number of issues that, whilst not necessarily applying to all range and consumer States, were of sufficiently widespread concern to warrant being identified separately. The team encourages those Parties that recognize the scenarios as being applicable to them to reflect upon such issues.

Determining Tiger Population Numbers

It was not part of the technical team's remit to attempt to discover the total number of tigers in the wild and it did not attempt to do so. Where range States gave estimated numbers of populations, these have been quoted in the team's report.

The team was told of the various methods used to determine population sizes and these are referred to in its report. Some clearly provide for a greater degree of accuracy than others. The team noted that countrywide scientific and methodical approaches are infrequent. It is more common for an accurate survey in one area to be used to thereafter estimate population numbers for the whole State.

The team does not wish to recommend any particular methodology. In any case, terrain, resources and a number of other factors will determine the most appropriate approaches. It is, however, greatly concerned that the use of, for example, the extrapolation of numbers in one area to provide an indication of total tiger populations throughout a country must be so open to the risk of errors as to make it an unreliable method upon which to base management plans.

In particular, unscientific and/or irregular (both in sites and in time) population surveys do not allow for the most effective deployment of enforcement personnel, especially anti-poaching units. If range States have limited resources, as they all presently do, then it is essential that resources be targeted where they are most needed and/or can do the most good.

The team noted that few range States are currently able to accurately determine whether tiger populations are falling, rising or remaining stable. It welcomes the fact that many are in the process of, or about to commence, more detailed work in this field. The team believes that a methodical and scientific approach to the subject is essential to the establishment and ongoing review of conservation strategies for the tiger.

Management of Tiger Habitat in Border Areas

Tigers do not respect national borders and many range States have areas of land where tiger territories straddle national boundaries. The team was impressed by the work done by some States, for example India and Nepal, to give protected status to adjoining areas so that a co-ordinated approach could be taken to management and conservation. This also allows for joint operations relating to enforcement and population studies. The team **commends** this approach to other range States,

Conservation Initiatives

The Global Tiger Forum

The team had the opportunity to meet with an official from the Global Tiger Forum (GTF) and to hear comments relating to the Forum from a range of officials and NGO personnel. The team acknowledges that progress by the GTF has been hampered through the slow ratification by sufficient Parties to allow it to move forward in its work. The recent ratification by Bangladesh removed that remaining obstacle.

The team was, however, told by officials and NGOs in several Parties that they were unsure of what GTF could achieve that could not already be achieved via existing agreements and Conventions. The team also heard of concerns over the contribution fees required when ratifying membership of the Forum. The team is aware that such issues were discussed at the last, informal, meeting of the GTF following the Millennium Tiger Conference in India in 1991.

Some of India's most respected tiger specialists emphasised to the team that the Global Tiger Fund is a concept with great but unrealised potential.

The team understands that, at its core, the GTF was intended to bring together tiger range and consuming countries to co-ordinate efforts to conserve wild tigers and their habitats, as well as stopping illegal trade in tigers and their parts. The GTF was never meant to supplant other international accords, or add yet another level of bureaucracy to such efforts. Indeed, it was intended to provide a forum with a sole focus on tigers, which could streamline the many bureaucracies that now seem to stand in the way of some of the relatively simple measures that could improve the tiger's dire situation in the wild.

The team believes that it is too early to assess the effectiveness of the Global Tiger Forum.

The team notes, however, that a number of bilateral and multi-lateral agreements have already been signed by some tiger range States. It is not convinced that such agreements have always

led to practical results and/or operationally meaningful liaison and co-operation. The team sincerely hopes that the Global Tiger Forum will not suffer from a similar lack of commitment.

Farming

It was suggested to the team that, given the proven success of breeding tigers in captivity with relative ease, such an approach would provide an answer to the present demand for the species.

The team cannot deny that captive breeding and ranching has proved to be a very effective means of enabling trade within the provisions of the Convention. Crocodile farms are a good illustration of this. The team doubts, however, whether such an approach would necessarily be beneficial to the survival of the remaining tiger subspecies in the short or mid term and that the following factors require consideration.

- a) Unlike the reptile skin trade where demand can be quantified, albeit approximately, most of the current demand for tiger and tiger products is illegal and, consequently, cannot be gauged to a meaningful degree.
- b) Knowledge of wild tiger population numbers is so limited and relatively poor that the success or failure of such an approach could not be measured.
- c) The likelihood of wild tiger populations being small, farming would provide an opportunity for laundering wild-caught specimens that would simply accelerate and/or assist current poaching and illicit trade.
- d) As a response to the current problems, on its own farming ignores the important other factors that a reduction in tiger numbers, as a flagship species, indicates. Range States might not consider and tackle degradation of habitat, loss of tiger prey species and the fact that illicit activities involving other species will invariably also be taking place and will not simply be restricted to tigers.

Hunting

Whilst there would undoubtedly be individuals who would be willing to pay substantial sums of money to hunt tigers, the team believes that the scope for this cannot be considered in the foreseeable future for the factors given at b), c) and d) above. Additionally, in the majority of range States visited, enforcement controls are not sufficient to allow adequate regulation of such an approach.

Eco-Tourism

The tiger's nature and behaviour does not readily lend itself to being viewed by tourists. Parts of its natural habitat, particularly some Asian jungle and densely forested terrain, is not conducive to visitors in the way that the savannah of Africa can be enjoyed.

That said, tiger range States contain beautiful landscapes that tourists could enjoy and these, together with the differing cultural experiences, would require to be accentuated alongside any opportunity to view wildlife. The element of chance in actually being able to see a tiger in the wild may, in itself, be a positive factor in attracting visitors. Similarly, the difficulties of access and lack of five-star accommodation facilities might also be seen as added attractions among the increasingly specialized 'adventure' holiday market.

The team believes that such approaches, especially if they employed traditional hunters who could identify likely viewing spots, might provide an opportunity for local communities to benefit from their fauna and flora.

In considering this concept, the team had in mind the work that has been done elsewhere to bring tourists into areas where they can see orang utan and mountain gorillas. Whilst the

potential for such eco-tourism must be limited, it envisages that there may be a market for this and that some people would be willing to pay substantial sums for such an experience.

The team does, however, believe that eco-tourism involving tigers must be carefully considered, planned and controlled before it could be beneficial to communities and tiger populations.

India and Nepal have already demonstrated the success of eco-tourism, although it must be recognized that much of their tiger habitat may be more conducive to visitors than that of other Asian range States.

Rehabilitation and Captive-Breeding Releases

The team is conscious of the work being conducted in this area and recognizes the potential of such schemes, especially given the reproduction success rates of tigers in captivity. It appears, however, that relatively few such projects incorporate, at present, elements that allow for the re-introduction to the wild of either captive-bred or confiscated animals. The team acknowledges the difficulties in preparing captive animals for a return to the wild. Captive-bred specimens may not have the hunting instincts and skills necessary for their survival in the wild.

The return of confiscated and seized tigers to the wild can be frustrated by risks of infection but, more importantly, the difficulties in identifying areas where they will not come into conflict with other tigers who have established territories. The team was told of the concerns, held by some persons involved in captive-breeding programmes, that re-introduced tigers might pose a threat to humans and/or livestock. That aspect clearly has considerable implications, not the least of which being potential litigation problems. It might also generate further animosity towards tigers and subsequent revenge killing of tigers.

There is little doubt, however, that population and habitat surveys may identify areas of suitable habitat that might be utilized for release programmes.

The team also believes that work on this subject will be of great importance, in due course, in relation to the introduction of animals to enable genetic diversity to populations that have been confined in areas where genetically viable populations have been seen as being at risk. The team also believes that recent research indicating that subspecies may not be so genetically different as might have been thought may provide greater opportunity for re-introduction schemes.

Negative Factors

Regrettably, the team learned during its work that progress in tiger conservation and tackling illicit trade is, in some Parties, hampered by the following factors.

Management and Policy Considerations

Albeit understandable in developing nations and those with economies in transition, conservation remains a low priority for many countries. The team saw examples of exploitation of natural resources the sustainability of which must be questionable. Many range States have administrations that are based upon practices developed during colonial periods. Whilst offering employment opportunities for large numbers of personnel, they are not necessarily efficient and many people appeared to fill posts that were not especially demanding upon their time.

It was not uncommon for the team to encounter officials who were clearly embarrassed by their lack of ability to answer questions in a detailed manner or who could be seen to be delivering responses that did not truly reflect the situation in the field.

Lack of direction from and/or meaningful supervision by management appeared to produce a situation where some enforcement personnel do not seem to carry out the basic essentials expected of such a post, particularly active patrolling and/or seeking out offences and offenders.

Personnel whose remit includes the task of tackling poaching and illicit trade hold positions that were initially created with much simpler duties in mind and may not be equipped to combat present illicit activities.

Some administrations appear willing to allow NGOs and/or foreign finance and practical aid to supplement or provide enforcement actions that other countries would expect to be the responsibility of their own staff. This situation occurs despite the fact that some of the range States appear to have very substantial numbers of Rangers, Guards, Police and Military personnel, some of whom may be under-employed.

As an example of the lack of imagination and innovation that seems to be present in some countries, the following incident was related to the team. Enforcement personnel in one country made a valuable and important seizure of a shipment of primates being moved illegally within its borders. Realizing that the monkeys had been seized a considerable distance from their natural habitat and that their release back into the wild would necessitate their transportation to the other end of the State, the department responsible contacted an NGO and asked for funding to allow this to be carried out. In doing so, the department ignored the very substantial resources of, for example, its nation's army that was well equipped with transport.

Not only did that demonstrate a lack of co-operation between internal agencies, it ignored the public awareness and excellent publicity potential, both within the country and internationally, that could have been achieved by inter-departmental or inter-ministerial liaison.

Corruption

All too frequently, the team was advised that corruption played a major part in the inability of some range States to tackle wildlife crime effectively. This was not surprising, given the poor salaries paid to government employees and the potential profits to be made from trafficking in endangered species.

Frustratingly, the team learned of many cases where the dedicated actions of such people as Forest Rangers came to nothing when offenders were subsequently handed over (as required by law or administrative edicts) to other agencies, for example the Police in some countries, for further investigation and/or prosecution. The team was told of one anti-poaching unit that had detected 1,600 offenders in a four-year period. Of those, only 40 had subsequently appeared in court. It seemed to the unit that the majority of the other offenders had been able to corruptly escape further action.

It was also told of instances where alleged corruption among the judiciary seemed to result in penalties being imposed that did not reflect the crime and/or cases being dismissed before a proper hearing of the evidence had taken place.

Collusion

Whilst similar to the problems of corruption, this problem is perhaps worse in terms of combating wildlife crime. The team learned of instances where enforcement staff and government officials were actively co-operating with poachers and traders or deliberately ignoring illegal activities.

It was told of a case in one range State where a policeman was found to be a 'middleman', receiving illegally taken wildlife products which were then allegedly marketed by a Chinese contact. Although the matter has still to reach court, the team saw photographs taken during a raid on the policeman's home where a 'processing' facility was found behind his house. Something of an abattoir was located where wild animals were skinned and subjected to taxidermy procedures. It was of considerable credit to those involved that enforcement action was taken against an individual who clearly felt himself immune from the law.

The team heard of scenarios where senior provincial or district officials simply ignored directions from central government and directed local enforcement staff not to target poaching or wildlife trading.

In a number of range States the team observed that military personnel, whilst perhaps having no truly legal or constitutional authority, are, in practice, regarded as the top level in the hierarchy of enforcement agencies. It heard of soldiers who were allegedly themselves active poachers. Indeed, press reports in one State identified a provincial military commander as the person responsible for controlling illicit wildlife poaching and trade.

Nepotism

The team heard of incidents in range States where appointment to positions in departments responsible for conservation and wildlife law enforcement relied more upon who you knew rather than what you knew. Indeed, the team met officials whose positions included responsibility for CITES implementation and enforcement issues but who clearly had no knowledge of national conservation and/or enforcement matters, let alone the Convention.

The team visited one Party where these problems were so well recognized amongst the public that it was commonplace for anything irregular or unlawful to simply be explained by quoting the initials, CCN, i.e. corruption, collusion and nepotism.

The team formed the impression that CCN is so extensive and ingrained in the cultures of some Parties that it was hard to believe that any progress could be achieved unless such practices were first eradicated. Regrettably, since such practices apply throughout every day life, it seems unlikely that CITES concerns, often an already low priority, have much chance of breaking through those barriers.

Partnerships

The team saw many excellent examples of joint activities between government departments and agencies and NGOs. It was concerned, however, that some Parties might allow the willingness of NGOs to supplant what may truly be country's own responsibilities. That said, the team vehemently believes that conservation of endangered species and enforcement of national and international law can only be effectively achieved through co-operation and multi-agency approaches.

It is anxious, though, that the role of government in conservation and wildlife law enforcement may not be sufficiently appreciated by the general public in many Parties and wishes to avoid the risk of such matters being seen as simply relating to NGOs. Whilst it would not, in any way, wish to discount the major part played by national and international wildlife and environmental conservation bodies, it does have some concerns about the way in which their involvement may be open to misinterpretation.

Enforcement and Non-Governmental Organizations

The team noted that, in a number of States, the involvement of NGOs was almost essential to wildlife law enforcement efforts. Not only did NGOs identify unlawful activities, they actively researched illicit trade, obtained evidence of illegal practices, prompted and assisted government agencies in enforcement action and evidence collection and, thereafter, funded and co-ordinated prosecution.

The team acknowledges that the involvement of NGOs in some countries results in enforcement activities that would, otherwise, simply not occur.

It **commends** the work being done in a number of range States and acknowledges that very little, if anything, might take place in some Parties without their input.

The team does, however, have grave concerns over the level of involvement of NGOs. It is of the opinion that some governments have abdicated their responsibilities to a degree where NGOs almost control the enforcement of domestic wildlife laws in some areas. It is also concerned that some Parties have authorized NGO members to carry firearms whilst front-line enforcement personnel do not benefit from such powers.

The team believes that it is absolutely essential for national governments, and their enforcement agencies, to co-ordinate and control investigations into alleged incidents of wildlife crime. NGOs can play a vital role in detecting illicit trade and persons engaged in such activities. Such organizations, however, operate without the level of accountability that is commensurate with State professional enforcement agencies and prosecution authorities.

The team is concerned that covert operations by NGOs could, if not adequately controlled, actually motivate wildlife crime and was told that this might have taken place in some countries. 'Sting' operations are an important and highly useful tool in the armoury of enforcement agencies. It is vital, however, that they be targeted appropriately and strictly monitored and authorized by government officials.

The team **recommends** that all range and consumer States, as a matter of priority, have in place efficient investigation and prosecution authorities and that any involvement of NGOs be limited to the provision of appropriate assistance and expertise. The aim should be that the involvement of NGOs could be dramatically reduced because the State does all that is required to operationally combat illicit activities.

Enforcement Issues

The team believes that Parties must acknowledge that before they can truly be effective enforcement officers should be trained and equipped to basic standards if they are to tackle wildlife crime meaningfully. At the very least they should have knowledge of:

- a) Relevant legislation and the powers granted to them
- b) The importance of crime information and the recording and dissemination of intelligence
- c) Collection and preservation of evidence
- d) Basic scene of crime examination
- e) Self-defence and arrest techniques including, where appropriate, use of firearms
- f) The questioning and recording of evidence from witnesses
- g) Lawful methods of questioning suspects and recording admissions
- h) The modus operandi in common wildlife crimes
- i) Forensic science support available

The team recognizes that the economies of many range States do not enable them to pay salaries commensurate with high motivation or to equip their enforcement personnel as they might wish.

Pursuant to Resolution Conf. 9.13 (Rev.), "RECOGNIZING also that long-term solutions to the protection, conservation and management of the tiger and its habitat require the adoption of bold and unprecedented actions", the team **believes** that it may be cost-effective and productive to reduce the overall number of personnel in some range States and use monies saved to create and fund specialized units.

Forensic Science Support

The team believes that awareness of the forms of forensic science support that are potentially available to enforcement officers should be increased. Pathology, morphology, ballistics, fingerprint identification, questioned document examination and DNA profiling are all examples of techniques that operational staff could call upon. Even if requests for forensic science support may, in practice, be rare, knowledge of the techniques available should enable enforcement officers to improve their own evidence collection work. Such awareness can also assist during the interrogation of suspects.

For instance, during its mission to Nepal, the team witnessed the removal of a snare loop from the leg of a rhinoceros. The loop could potentially have been linked, scientifically, to similar material recovered from suspects in that incident of poaching, or other incidents. At a more basic level, a description of the material could be provided to anti-poaching units at briefing sessions, so that they could thereafter look out for similar material in the possession of suspects and also be armed with that information when questioning suspects.

The team **recommends** that consideration be given to preparing a simple guide to the forms of support available and the ways in which they can be deployed to assist in combating illegal killing of and trade in CITES-listed species.

Tourist Souvenirs in Duty Free Shops

The team was concerned to see that CITES-listed specimens were for sale in duty free shops in many of the airports through which they passed in the course of the missions. That included Bangkok, Beijing, Hanoi, Ho Chi Minh, Phnom Penh and Jakarta. Items for sale included stuffed and mounted cat species, traditional medicine products and reptiles. Whole turtles and turtleshell products were common. Snake and crocodile skin wallets and handbags were also often seen. When asked, sales assistants invariably said that no documentation was needed to export the items.

Even if, in some instances, such sales were not against national law the team feels that it would be only fair to warn potential customers that most, if not all, of such wildlife products might be confiscated by Customs officers in, for example, Europe and North America.

Education and Awareness

Education and Awareness Methodology

During the missions, the concept of education and awareness programmes was mentioned many times and encompassed many activities and different audiences.

Education risks being seen as a panacea to all problems without being placed in an overall approach to protect the tiger and its habitat. The team believes that different audiences require customized programmes and that each programme should have specific priorities.

The needs identified cover a spectrum of audiences; politicians (decision makers), Management and Scientific authorities, specialized enforcement officers, other enforcement officers (Customs and Police), governmental agencies with complementary mandates (forestry and agriculture), potential partners (religious authorities and schools), natural resource users (hunters, loggers and farmers), and the general public (adults and children).

Each audience has its own environment and the choice of the approach is essential for the success of the programme. Some will be satisfied with an overview that makes them aware of the issue, whilst others may require detailed training to master the Convention, their national legislation and techniques related to the implementation of their responsibilities.

Depending on the political structure of the country, its experience with CITES and the values of its society, the programme should use adapted approaches and, where necessary, different languages.

It may be counter-productive to believe that the easy delivery of a single programme or product will succeed. It is very important to recognize cultural differences and develop and customize programmes for each country and each audience.

The team **commends** the education and awareness campaigns relating to TM used by a number of Parties. It is wary, however, that the focus of some is too narrow. By concentrating on

megafauna species, such as the tiger, rhinoceros and bear, campaigns may create an impression that only the well-known species are of significance, which ignores the fact that specimens of many CITES-listed species feature in TM products. There is also the risk that the impression is given that the authorities are only interested in a few select species.

The team believes that further thought should be given to the manner in which training is provided to enforcement personnel in range States. It notes that CITES training and enforcement seminars, provided by a number of international, governmental and non-governmental organizations, have been highly successful and appreciated by recipients. It **suggests**, however, that there is considerable scope for on-the-job training and that this might require the secondment of experienced Police, Customs and Wildlife Officers from developed countries to enable the provision of practical advice and information that can not readily be conveyed, or learnt, during the limited duration of seminar or workshop.

Conflict Cases

Historically, there has been a widely held belief that tigers that attack humans or livestock are old, injured or ill animals that are prompted to do so because they are not fit enough to kill their usual prey species.

In complete contrast, the team heard during its missions that 'problem' tigers were routinely found to be young and fit animals, often males, who were able to carry out attacks, particularly on humans, with considerable ferocity and strength.

It has been noted in a number of range States, however, that man-eating tigers may display old injuries consistent with their having been targeted by poachers. The team is of the opinion that it may be useful to publicise this fact in awareness and education campaigns. It **recommends** that States publicize the fact that poachers are not only breaking the law when attempting to kill tigers but may also be endangering local communities through their actions and risk producing man-eaters.

The Status of Other Appendix I Species

The team has indicated elsewhere in this report its anxiety that too narrow a focus can be counter-productive. It risks giving the impression among potential consumers, together with poachers, smugglers and illegal traders, that the authorities are only interested in, or concentrating on, tigers. It may also prompt enforcement agencies to deploy their resources in a manner that will not be helpful in the longer term.

Throughout their missions the technical team repeatedly heard of poaching of rhinoceros in Asia. Indeed, some range States believe that poachers target rhinoceros species more than tigers.

Elephant poaching, although not apparently widespread in some range States, was said to be a problem in others. Of great concern, as in parts of Africa, was the conflict between elephants and humans. In Sumatra, for example, governmental policy prohibits the killing of 'problem' elephants. Instead, animals that have come into conflict with human settlements are captured and transferred to a sanctuary that attempts to domesticate and train elephants. The number of elephants in the facility is, however, considerable. The team was told that current CITES trade restrictions oblige Indonesia to find internal answers to this problem. Some people think that culling, albeit regrettable, might have to be considered as a means of problem animal control.

The team firmly believes that poaching of and illicit trade in leopard should be of great concern for the Convention. It repeatedly heard of conflict between leopards, humans and livestock that results in attempts to poison or otherwise kill such animals. The species appears to be increasingly popular for traditional medicine and seems to be regarded in some areas as a valuable alternative or replacement for tiger. Leopards also seem to be popular in the illicit skin and exotic pet trade. Team members heard of leopard poachers on the Russian Federation/Chinese border who killed a Russian Federation border guard who had tried to intercept them.

The team gained the impression that comparatively little work is being done in relation to leopard population surveys, particularly when compared to what is being carried out for tigers. Yet, comments from workers in the field and NGO staff indicate that leopard populations may be experiencing rapid reductions through the very same factors that impact upon the number of tigers.

In the Russian Federation, the team was told that lack of captive-breeding facilities might prevent any ability to conserve a genetic resource of the Amur leopard.

The team believes that the leopard is an excellent example of the dangers of too narrow a focus, whether that be by range States or the Convention and its meetings of the Conference of the Parties.

During its missions the technical team was very conscious that the responses that could assist the survival of wild tiger populations could also provide for the continuing presence of many other species, especially those listed in Appendix I of CITES.

The team believes that one possible evaluation of the worth of its work would be whether a similar team ever has to be dispatched in the future “to assist in developing strategies for improving control of trade and related activities” in yet another species, in the same way that Decision 10.66 b) called for activities relating to tiger.

RECOMMENDATIONS RELATING TO INTERNATIONAL STRATEGIES

1. The team suggests that those tiger range States who have yet to accede to the Convention should be encouraged to do so at the earliest opportunity.
2. Tiger range States should be encouraged to develop and engage in bi-lateral and/or multi-lateral enforcement agreements with neighbouring countries to enable the free exchange of information and operational contact between enforcement agencies to provide lines of communication that will assist in targeting illicit shipments and persons engaged in wildlife crime.
3. The team believes that an international view of illegal trade in tiger specimens and illegal hunting of tigers would be beneficial. It suggests that the CITES Secretariat’s reporting forms, initially designed to cater for the illegal ivory trade and poaching of elephants, should be amended and adapted to collate information relating to tigers.

The forms should be distributed via a Notification to the Parties seeking the co-operation of all Parties in reporting illicit activities. Information received would then be stored and analysed in a manner identical to that used for storing information on illegal ivory trade and illegal hunting of elephants.

The team believes that the shortcomings in international exchange of information and co-ordination of operational responses to infractions against the Convention require to be addressed urgently and meaningfully.

4. The team believes that progress of the Monitoring of Illegal Killing of Elephants (MIKE) system, which is now being piloted in some Regions, should, itself, be monitored with a view to determining whether a similar approach could be used for illicit hunting of and trade in tigers.
5. It recommends the creation of a CITES Enforcement Task Force (CETF). It envisages this consisting of representatives of the range and consumer State regions. Representatives should hold middle to senior management level positions within their national law enforcement agencies. ICPO-Interpol and the World Customs Organization (WCO) should also be invited to participate.

CETF regional representatives would be responsible for collating all information relating to infractions within their area and other relevant details, such as forensic science developments, and disseminating this throughout the Task Force as a whole. Importantly, such regional representatives would be responsible for personally communicating operational information to their counterparts in other parts of the world and for obtaining the results of investigations.

Whilst not wishing to circumvent or ignore the already-established lines of communication, such as via Interpol, WCO or the CITES Secretariat, such personal contact would allow the development of rapid, secure and trusted contacts that should enable meaningful collation and exchanges of useful information that, currently, is remaining inside national boundaries and not being employed to its full extent. Meetings of CETF would allow enforcement experts to come together to develop and monitor strategies to combat international wildlife crime and the provision of support to range or consumer States who suffer from poorly developed law enforcement resources or logistics.

It is suggested that CETF meet, perhaps twice annually, and that the CITES Secretariat provide a secretarial and administrative service to the Task Force. External funding may be required to facilitate meetings of the Task Force and any necessary interpretation or translation services. The work of the Task Force would be reported upon, in general terms, to each meeting of the CITES Standing Committee.

Sufficient numbers of regional representatives should be created to cater for the size of the range and consumer State regions.

The team suggests that CETF, in the first instance, concentrate upon illicit trade in tiger specimens. It sees considerable potential, however, for the Task Force's remit being extended to other Appendix I species where illegal activities are having great impact.

CAMBODIA

Tiger conservation issues

Cambodia has substantial terrain that is suitable tiger habitat. Ratanakiri Province, for example, is thickly forested and appears to support many potential prey species. The forest areas are relatively sparsely populated and the major mid - to long-term threat appears to be from habitat loss through illegal logging. The very nature of the terrain does, however, create major problems for population surveys and enforcement. The team encountered hardly anyone who had seen a tiger in the wild and realized that the habitat would be extremely difficult to patrol effectively, especially the long and ill-defined borders with neighbouring countries. Yet, alongside these factors is the worrying estimate that at least ten tigers each year are being poached in that province alone.

There are, however, some areas in northern Cambodia that are regarded as so remote and difficult to access that tiger populations are thought to be safe from poaching there.

Tiger population sizes in Cambodia have not been determined to any degree of certainty. A recent study, employing questioning of local officials, Rangers and hunters indicates that numbers throughout the country may be larger than previously thought, perhaps even more than a thousand. It was emphasized to the team, though, that the survey primarily gives a baseline for further, more scientific and formal work.

If correct, however, this is a promising situation, which Cambodia has an opportunity to build upon but which is clearly threatened by the regular and serious poaching that is acknowledged to be taking place.

Importantly, the survey also established good initial links with hunters (the term includes all those engaged in killing animals and not just professional hunters) who can potentially be contacted for

further research but also as an avenue for work on education, awareness and diversion to other legal activities.

Government estimates indicate that Cambodia may have lost 10 per cent of its forests since the 1960s. Illegal logging is common, especially along the border with Viet Nam, all vital tiger habitat. It is recognized that this impacts upon the availability of the tigers' prey species. People engaged in logging often poach animals from the forest for food and the illegally created logging roads change the nature of the habitat and displace species.

Legislation

Cambodia has no specific legislation to implement CITES and it is doubtful whether it can do so effectively. That said, it is currently engaged in drafting new law and the team was impressed by the fact that government officials viewed that as a priority.

In common with a number of other countries in Asia, Cambodia makes use of decrees or declarations, which, although not having the legislative basis of parliamentary law, notify enforcement agencies and the public at large of governmental policy. Decrees and declarations often contain substantial detail with regard to administrative procedures and the prohibition of certain acts and behaviour. They do not, however, provide enforcement and sentencing powers and, thus, cannot be regarded as true legislation by the courts.

That acknowledged, they could often have practical effect and result in actions by enforcement agencies. One such action is described later. Their use often seems to be something of a stopgap measure whilst formal legislation is drafted and subsequently formally enacted by government.

At the time of the technical team's visit, Cambodia controlled wildlife trade by means of Declaration No. 359, issued by the Ministry of Agriculture, Forestry and Fisheries on 1 August 1994. Article 2 of the Declaration states that it "the catching, poisoning, hunting of wildlife and transportation of living animals, fresh meat or wildlife specimens, as listed, shall be absolutely prohibited". There then follows a list of approximately 120 species and subspecies of mammals, reptiles and birds that are present in the wild in Cambodia. *Panthera tigris* is included in the list, together with many other CITES-listed species.

The team had sight of a decree, not available in English, that was issued by the Prime Minister in January 1999 that called for a 'crackdown' on illegal wildlife trade. It was informed that this has resulted in a number of enforcement actions. In particular, the Decree called upon all enforcement agencies to participate in the 'crackdown'.

Cambodia does not have legislation that takes account of Resolution Conf. 9.6 and, consequently, enforcement staff might not be able to take action against goods purporting to contain parts and derivatives of tiger.

Practical Controls

CITES Administration

Cambodia ratified the Convention on 4 July 1997 and it entered into force on 2 October 1997. A Management Authority and two Scientific Authorities have been notified to the Secretariat. However, at the time of the team's visit Cambodia was still organizing its administration of CITES issues and plans to create a national Secretariat to co-ordinate matters relating to the Convention and to provide an office with staff who will oversee inter-agency work on the subject.

The Ministry of Environment (ME) is responsible for internal wildlife controls affecting National Parks, whilst the Ministry of Agriculture, Forestry and Fisheries is responsible for the same issues on all other land. The Ministry of Agriculture, Forestry and Fisheries is responsible for all CITES matters in Cambodia.

Enforcement staff

Both the Ministry of Environment and the Ministry of Agriculture, Forestry and Fisheries have Ranger personnel to enforce controls.

For example, in Ratanakiri Province, the Ministry of Agriculture, Forestry and Fisheries (MAFF) has 35 Rangers who are responsible for enforcing controls on wildlife and forestry. They have only four motorbikes and three boats to assist in patrolling a huge area. A foot patrol of Ratanakiri Province's border with Viet Nam takes eight days. There is no road that runs the whole length of the border. Rangers are also tasked with tackling the problem of illegal logging. Most Rangers are stationed at legal border crossing points and have very little equipment that would enable them to engage in mobile anti-poaching activities or patrols. Local officials told the team that they have insufficient funds to pay for the extra food and medicine that would be necessary for effective patrolling in the field.

ME Rangers are not armed and the team was advised that the local communities would not welcome them being so. MAFF Rangers do have access to weapons but they are few in number and of small calibre and are not seen as being capable of protecting personnel efficiently. MAFF Rangers rely on access to Police radio communications at border checkpoints, as they have none of their own.

In contrast, as a result of Cambodia's recent political troubles, possession of firearms is widespread amongst the population, especially in rural areas. Such weapons are often of military calibre and are of automatic or semi-automatic type.

The team was advised that a lack of co-ordination between the enforcement agencies that could impact upon illegal activities is hampering effective action. Further, there appeared to be some mistrust between departments, with the military being viewed with some suspicion. Indeed, during its visit the team read press reports of allegations of soldiers either carrying out poaching or colluding with wildlife traders.

The salary scales of government and enforcement officials are often so low that many people have a second job or engage in private enterprises to gain additional income. This is seen as not only leaving people open to corruption but also providing little motivation for them to dedicate themselves to their official duties. The team believes this factor to be a major impediment to long-term efficiency in combating illicit activities.

Illicit trade

The technical team visited the Oyadao border crossing between Cambodia and Viet Nam and found a complement of Army, Police, Customs and MAFF personnel. Few vehicles use the crossing each day so there is the opportunity to carry out detailed inspections. The team was of the opinion, however, that wildlife smugglers would have little difficulty in crossing the border elsewhere than at the formal checkpoint. Indeed, local information indicated that illicit hunters and traders crossed by forest paths and that such criminals were active at night when enforcement officers do not patrol.

Local enforcement personnel said that a tiger's carcass could fetch USD 1,000 if smuggled to a trader in a neighbouring State. The team learned that there were few seizures by border crossing staff.

During its mission the team was told that many endangered species, including tiger, are killed by ethnic minority residents in the provinces and then either traded across the borders to Thailand, Lao People's Democratic Republic and Viet Nam or to buyers in (primarily) Phnom Penh. Illegal immigrants resident in border areas are viewed as being very active in illegal activities.

The team was also informed, though, of reports of poaching gangs that are allegedly managed by Thai businessmen who specifically target elephant and tiger. It is said that poachers associated with that organized activity have been equipped with large calibre and high quality rifles, often with telescopic sights. Such poachers will allegedly shoot elephants for their ivory and then wait for a tiger to feed on the carcass and thereafter kill the tiger too.

MAFF management staff in Ratanakiri Province reported that poaching of tigers is known to involve the use of a prey carcass that has landmines placed around it to kill tigers. NGOs told the team that this method has been refined by the Thai poaching gangs who place a dead monkey as bait, with a grenade beneath. The resulting detonation kills the tiger but limits the damage to its skin and skeleton, thus providing maximum financial profit.

Snaring is also a method of trapping tigers that is employed by those who do not have access to firearms. The team was advised that a substantial amount of subsistence poaching takes place in rural areas although this tends to be seasonal once the main work on rice planting and harvesting has been completed.

A senior Police officer told the team that his staff seldom encounters tiger hunting or illegal trade but receives many reports of it taking place. The perception among the Police was that tiger numbers were low and that poaching was not so frequent. The Police have no anti-poaching strategies. Conversely, a senior Ministry of Environment official said that he considered tiger poaching to be high. This appeared, to the team, to demonstrate a lack of intelligence sharing at a national level.

Although the value of protected wildlife is usually quoted in monetary terms, especially US dollars, the team was told that hunters would often be paid 'in kind' since their residence in remote locations gives little value to national or international currency. The team spoke with one wildlife trader who indicated that she retained links with her hunter suppliers by means of advances on payments or loans of rice and other goods that the hunter needed for his family.

That particular trader was one of a number of wildlife meat stallholders based on verges of the main road between Phnom Penh and Sianouk Ville. She advised the team that her sister had little difficulty in obtaining tigers, live and/or dead, from hunters who operated in the nearby mountain region. She said that a live tiger (probably a cub) could be sold for up to USD 800 to buyers in Phnom Penh, whilst a dead animal could attract a price of USD 500-700 for traditional medicine use. She said that her sister would trade 8-10 tigers each year and claimed she last sold a tiger two months previously. The woman told the team that her husband, a soldier, supplied with stall with poached bushmeat.

The team was told that the trader's stall was one of the many that had apparently been set on fire by enforcement agencies following the Prime Minister's Decree in January 1999. Although the wooden stall showed extensive signs of charring, it appeared to have been quickly re-built.

A few kilometres closer to Phnom Penh, on the same road, the team visited a number of other stalls that were openly displaying 'bushmeat' for sale. Whilst some stallholders were apparently nervous and initially reluctant to indicate the full range of specimens on offer, others readily encouraged the team to enter rooms situated at the rear of the front stall displays which were actually part of their living premises. In three premises alone, the team was able to view live specimens including monkeys, slow loris, jackal, owl, parrots and reptiles alongside dead primates, pangolins and stuffed golden cats, fishing cats, civets and deer. Meat from various species of wildlife, especially deer and wild boar, was openly on sale. The team noted that many of the carcasses on display had apparent bullet wounds consistent with large calibre, military-type weapons.

In the O Russei market in Phnom Penh, the team found a wide range of plant material and dead specimens of species listed as protected by Declaration No. 359. Live snakes and a leopard cat were also on offer. In the rear of one shop, the team discovered a whole leopard skin and a

whole tiger skin for sale. The trader wanted USD 630 for the tiger skin. Another shop had a small piece of tiger skin on offer but it appeared quite old.

Objects that traders claimed to be tiger claws were on sale for USD 120 each but the team doubted, from their appearance, that they were genuine. Bear skins, teeth and claws appeared easily available and several stalls were selling carved items that were allegedly ivory although the team thought some of them to be fraudulent.

The team was struck by the apparent age of many of the items (apart from plants) and most seemed to have been in stock for a considerable period. One skin, clearly from a large species of cat, was so old that it was essentially mummified and beyond recognition although the shopkeeper claimed that it was leopard.

Traditional medicine

The team visited a traditional medicine practitioner in Phnom Penh who told them that although demand for products containing tiger was still high, obtaining tiger bone and other carcase parts was much more difficult than in the past. He did, however, say that he had obtained a tiger skeleton for a Chinese buyer during the previous year.

Traditional medicine products were widely available in the O Russei market and some stallholders, who did not appear to be professional TM practitioners or pharmacists, would prepare products for customers. The team saw packets of tiger bone plasters for sale but were of the opinion that the low price indicated that the presence of genuine tiger ingredients seemed unlikely.

There is a significant ethnic Chinese presence in Cambodia but TM products are obviously used too by local populations.

Special projects

The World Wide Fund for Nature (WWF) has assisted the Ministry of Environment (ME) to establish a Ranger force of seven persons in Virachey National Park. They have limited equipment but display considerable enthusiasm for their work. The Rangers in the National Park, however, are actively attempting to make contact with villagers and to persuade them to comply with controls. A scheme to use community volunteers to assist Rangers in protecting nature is under development.

The team **commends** this initiative and **recommends** its expansion to other areas.

Education and Awareness

Enforcement personnel

Staff from Cambodia's Management Authority attended a CITES training seminar that was held in Thailand in 1998. That apart, knowledge of the Convention appears likely to be extremely limited among enforcement and implementation personnel.

The general public

If one accepts that rural residents carry out the majority of hunting, then education and awareness campaigns will be problematic. Ratanakiri Province has nine ethnic minority groups; most of who do not speak the national language of Khmer. Many cannot read either. One must also be conscious that many rural residents do not view wildlife as the public of North America or Europe might. Although some residents may have a traditional respect for the tiger, general animal welfare and conservation issues have no place in their life and the overwhelming concern is one of acquiring food or additional income for their family.

Forest Rangers in Virachey National Park are engaged in work to raise conservation consciousness amongst local villagers but there are no active national campaigns to address illicit hunting, trade or consumption. The team saw two examples of posters using simple illustrations and Khmer text designed to discourage poaching and promote conservation of tigers, which had been produced with financial assistance from NGOs and foreign aid.

The language difficulties identified above, however, together with the problem of finding suitable display points and the fact that the climate would soon lead to their disintegration, makes poster campaigns less effective perhaps than in western parts of the world.

The team visited a zoo on the outskirts of Phnom Penh and found it to be very popular, with many local people making the 40km journey from the city. The majority of the animals exhibited came there as a result of confiscations by enforcement authorities, including several cat species, Asiatic black bears, sun bears and tigers. The tigers, in particular, attracted considerable visitor attention. NGO and foreign aid has been and is being used to enhance animal enclosures, some of which are far from adequate. In addition, obtaining food for the animals has been problematic, particularly since neighbouring village residents often do not have adequate food either.

Although a building at the zoo's centre has been constructed, apparently with European Union funding, as an education centre, it is not fully utilized or equipped. The team was shown another building full of dead and mounted specimens but this did not appear to be open to the general public.

Hardly any information relating to the animals was present. Enclosures simply had a small notice giving the scientific, Khmer and English names of species on display but nothing further. The team felt an opportunity to educate and raise awareness of a range of issues had been missed and could be provided with relatively little funding. It was disappointed that the awareness posters referred to above were not displayed at this highly appropriate venue.

The team **recommends** that the negative aspects of the zoo should be addressed and its positive potential utilized more.

Aspects for Improvement

The planned organization of a CITES office with the mandate to co-ordinate activities with other agencies is **commended**. The team **recommends** to potential donors that this project receives assistance, financial and in staff training.

The team formed the impression that enforcement officials, particularly Forest Rangers, may be viewed by the general population as something of a necessary evil. Although the reasons for their existence are understood, they are not held in high esteem and may thus be understandably poorly motivated.

Further, whilst not wishing to imply any disrespect or in any way demean the efforts being made by operational staff, the team wonders whether the historical approach to such enforcement officials has not been overtaken by events. They are poorly equipped or trained to effectively combat what can, at times, be sophisticated and organized crime, especially where it involves international elements. Already somewhat restricted, for a variety of reasons, in their ability to tackle subsistence poaching and wood-gathering by local residents, it is all the less likely that they can meaningfully impact upon persons or groups targeting endangered species and the traders involved subsequently.

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens and co-operate with other enforcement agencies.

However, recognizing that this is unlikely to be achieved in the short term, the team **recommends** that supplementary practical advice be provided to operational personnel as a priority. For example, it

suggests that the type of manual that has been prepared by TRAFFIC for use elsewhere in Asia be adapted and translated into Khmer and widely distributed among, in particular, Forest Rangers.

The team **encourages** Cambodia to continue its efforts to draft new legislation and recommends that the CITES Secretariat should assist by reviewing the draft, once available. It **recommends** that any new legislation should take account of Resolution Conf. 9.6.

The interesting tiger survey work, carried out by Cat Action Treasury, **should be developed and expanded**, especially by the use of camera traps, so as to obtain accurate population figures.

The team **recommends** that Cambodia draw upon the experience of other range States in developing initiatives that will assist tiger conservation, whilst also being of benefit to local communities.

The team **recommends**, similarly, that Cambodia draw upon the experience of others in developing and instigating conservation awareness campaigns. Such campaigns should specifically target illegal hunting of and trade in endangered species. The team **suggests** that collaboration with TM practitioners and pharmacies take place and that, at a very early stage, market traders who are currently openly offering CITES-listed specimens for sale should be targeted for enforcement and education.

Overall, the team believes Cambodia is a range State with considerable potential for conservation of tigers but that many of its points of concern require urgent action and will necessitate external funding assistance.

CANADA

Tiger conservation issues

There are no wild tiger populations in Canada.

Legislation

Canada enforces CITES through its Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA), which came into force in 1996. The Act provides for substantial penalties for individuals; fines of up to CAD 150,000 and/or five years in prison and larger fines for corporations. Fines can be doubled for a second offence and can apply to each specimen or part referred to in a prosecution. The legislation makes the import of tiger parts and products unlawful unless authorized by CITES export and import permits; possession for purposes of sale is unlawful.

However, the law does not specifically mention derivatives that are not readily recognizable as coming from tigers, such as those in TM products. That said, many significant seizures of traditional medicines purporting to contain endangered species have taken place, particularly at Canada's borders, on the basis of illegal import. Appeals against the decision to seize have seldom followed such seizures. However, there have been very few prosecutions.

At the time of the technical mission, Canada was in the process of considering changes to its legislation to take account of Resolution Conf. 9.6. The team was advised that there are constitutional difficulties, in that such a move shifts the burden of responsibility from the prosecution to the defence in a manner that is in conflict with Canada's accusatorial legal system.

Canada's legislation does not designate specific ports for import and export of CITES specimens.

Practical Controls

CITES administration

Canada ratified the Convention in 1975 and the Minister of the Environment is responsible for its implementation. The CITES Management and Scientific Authority for the State is Environment Canada, with ancillary management and scientific authorities with the Department of Fisheries and Oceans, provincial and territorial governments,

Enforcement staff

Enforcement of WAPPRIITA is primarily a matter for the personnel of Environment Canada. In addition to inspections of CITES shipments and investigations, they co-ordinate activities with other enforcement agencies. The Wildlife Officers of its Wildlife Enforcement Division are spread throughout Canada and are based within each of Environment Canada's five regions. The highest number of Wildlife Officers in a region is five, with the lowest being two. Officers responsible for other federal wildlife legislation may be called upon to support major operations.

Setting aside personnel at headquarters, this results in fewer than 35 operational officers across a huge nation. The team learned that these officers often had to respond, albeit quite properly, to regional concerns and priorities and that, consequently, this may impact upon their ability to become involved in federal programmes.

By necessity, Environment Canada works very closely with Canada Customs and it is Customs officers who first encounter wildlife imports, legal or illicit. Wildlife Officers are not stationed at ports and Customs officers play the primary role in inspection of shipments. There is a formal Memorandum of Understanding between Environment Canada and Canada Customs. An appendix to it addresses issues specific to CITES violations and another, relating to inspections, is under negotiation. Environment Canada has engaged in significant training of Customs officers.

Customs officers apparently particularly appreciate the strength of WAPPRIITA controls and powers. Customs officers can also contribute to CITES enforcement through inspections of postal shipments.

In a recent initiative, Environment Canada equipped some major ports with digital cameras. This enables officers to take images of shipments and documents and then send them, electronically, to Environment Canada offices, or other centres of expertise, where advice can rapidly be obtained on identification of specimens or validation of documents. The project appears to have been highly successful and is an imaginative way of overcoming resource and geographical difficulties. The team **commends** the use of such technology to other Parties.

Environment Canada has a very active and efficient intelligence unit at its headquarters. Its role is to ensure the effective use of resources in that field of activity and to co-ordinate intelligence projects with regional offices, partner organizations and other agencies.

Its federal Wildlife Officers interact with provincial game and wildlife staff where appropriate and relevant. The Wildlife Enforcement Division also has close links with provincial and city police forces and the Royal Canadian Mounted Police (RCMP).

The RCMP, whilst having no direct responsibility for enforcement of WAPPRIITA, has considerable potential to assist through its links with Interpol. RCMP is also responsible for federal investigation of commercial smuggling and organized crime.

Illicit trade

Customs and Wildlife officers in the Ontario and Pacific/Yukon regions have made a large number of seizures of TM products and have been very successful in detecting and intercepting

individuals carrying quantities that appear to have been meant for personal use. A significant Asian community lives and trades in these regions.

Environment Canada has produced lists of products containing CITES-listed specimens and a manual with examples of packages and their ingredients is available to its officers.

In response to a review of TM sales in North America that was conducted by TRAFFIC, the Wildlife Enforcement Division of Environment Canada instigated an in-depth inspection of outlets and provided advice on complying with WAPPRIITA. Many detentions, seizures and confiscations were carried out but no prosecutions had, at the time of the missions, followed.

Commendably, the Division has also made contact with the authorities in China and provided them with examples of TM product packaging that indicated firms in that country as being the manufacturers. The response they received was that the packaging was a fraudulent copy of that used by bona fide traders prior to China's ban on the production of medicines containing tiger ingredients in 1993. Chinese authorities advised the Division that they had taken action against some companies.

Special projects

Environment Canada is internationally renowned for the production of identification manuals for enforcement staff and for assistance abroad to CITES training. The manuals have been published in a number of languages. The team **commends** Canada's work in that field. It is also aware that further identification manuals are ready for publication if funding becomes available and **recommends** other Parties and organizations to assist in these ventures.

Environment Canada has a strong commitment to reinforce partnerships with federal and provincial enforcement agencies and co-ordinate enforcement activities with partner organizations. At the national level, Environment Canada is an active member of the Federal/Provincial Wildlife Enforcement Chiefs Association. The Association brings together the Enforcement Chiefs with responsibilities for wildlife enforcement in the five federal departments, the ten provinces and the three territories. At their annual meeting, the representatives exchange information, agree on strategies to address common issues, share the workload for joint projects and promote the protection of wildlife. They also define the Canadian position to be presented at international meetings and conferences.

At the international level, Environment Canada is, with Mexico and the United States of America, a member of the North American Wildlife Enforcement Working Group (NAWEG) and participates in some of the activities of Interpol and the World Customs Organization.

Education and Awareness

Enforcement authorities

Environment Canada has clearly done a good deal of work in raising awareness of the TM issue among other enforcement agencies who can have an impact upon illicit trade. It also has a long history in the promotion of general CITES enforcement awareness and assistance. Its Wildlife Enforcement Division is acting as editor for a training module being designed under the auspices of the World Customs Organization.

Traditional medicine practitioners and consumers

Posters and leaflets designed to promote awareness of endangered species products have been produced in several Asian languages and distributed to ethnic communities. Some projects have been completed in collaboration with WWF. It is understood that liaison is ongoing with such communities and with TM practitioners and pharmacists. The technical team's time in Canada was limited and it was unable to investigate that aspect further.

The general public

Environment Canada has produced a video, in English and French, to alert travellers to the provisions of the Convention. With the co-operation of Revenue Canada, these are shown at ports. Displays relating to CITES are similarly sited. Leaflets to raise awareness of CITES have also been produced in a number of languages. The team **commends** that work.

Aspects for Improvement

The team **believes** it is vital that Canada adopt legislation that will enable enforcement and prosecution action to be taken against the domestic sale of products purporting to contain CITES-listed specimens. Using the definition in Resolution Conf. 9.6 should also assist in prosecuting import and export violations. Without such law, it is difficult to see how further progress can be made.

Whilst understanding that Environment Canada's limited enforcement resources must be best deployed to meet the demands of its regions and to cope with the huge size of the nation, the team is **concerned** that this might adversely affect federal and/or national initiatives. It is similarly **concerned** that the lack of resources may seriously inhibit Environment Canada's ability to meaningfully engage in public awareness programmes to the extent that the apparent demand for TM products indicates may be required.

The team **believes** that there is scope for the establishment of a Memorandum of Understanding between Environment Canada and the Royal Canadian Mounted Police, similar to that negotiated with Canada Customs.

The team is aware that the TRAFFIC Network has relatively recently been extended into Canada, although only on a part-time basis. It **believes** that there is considerable scope for NGO support to statutory agencies in Canada.

Probably the most significant factor against increased enforcement and education in Canada is the sheer size of the nation and the distances between its centres of population. Nothing done by a statutory or non-governmental organization can alter that.

CHINA

Tiger conservation issues

China has designed an Action Plan relating to tiger conservation. Emphasis is placed on captive breeding, as well as habitat conservation. Since the mid-1990s, research to identify substitutes for tiger ingredients in medicinal products has been listed as a priority scientific research project under the Ninth National Five-Year Development Programme and one substitute has already been put into use.

A CNY 30 million project exists with the intention of releasing captive-bred tigers into the wild. A special project is devoted to captive-breeding of the South China tiger (*Panthera tigris amoyensis*).

Habitat

The Chinese Government regards conservation of habitat as a major priority. Since the 1960s, numerous reserves have been created to assist the preservation of endangered species.

For example, 41 per cent of Heilongjiang Province is covered by forest. Two per cent of the Province (110 million hectares) is part of the over 150 nature reserves that have been established. Three thousand and five hundred people, including the staff of nature reserves, forestry agencies and fishery agencies are dedicated to wildlife conservation in the Province,

which is home to 16 Category I state-protected and 67 Category II state-protected species. 50 species are being bred in captivity. The Province has 39 million human residents.

China has 926 nature reserves spread throughout the country.

Population surveys

The Chinese Government has allocated, respectively, CNY 300,000 to survey each of the tiger subspecies (Bengal (*Panthera tigris tigris*), Siberian/Amur (*P. t. altaica*), Indo-Chinese (*Panthera tigris corbetti*) and South China) that are believed to be present in the country. The only recent survey for which results are available is that of the Siberian/Amur tiger, which estimates that 25 tigers are scattered along China's border with the Russian Federation.

Officials told the team that the increasing human population, and loss of habitat, in border areas means that increases in these tiger numbers appear unlikely.

Financial and practical assistance from the United States of America, and practical assistance from the Russian Federation, has been used to conduct surveys.

Legislation

Since 1988, China's main piece of legislation protecting wildlife has been the Wildlife Conservation Law. Subsequently, every province, autonomous region and municipality has enacted its own regulation, or bye-law, to implement that basic law. In addition, the Regulation for the Protection of Terrestrial Animals, the Regulation for the Protection of Aquatic Animals and the Regulation on the Management of Forest and Wildlife Reserves can all be used for enforcement purposes. Forest and fishery laws also provide protection.

The Criminal Law, amended in 1997, provides severe penalties for unlawful taking, transportation, purchase and selling of state-protected wild animals, as well as the use of fraudulent permits. The penalties range from 5 to over 10 years imprisonment, plus fines and confiscation of property. Smuggling of state-protected rare and endangered animals can attract the death penalty, which has been imposed on 12 occasions since 1986. Trade in Category I state-protected species, which includes tiger, may only take place with the authority of the State Forestry Administration. The Regulation on the Management of the Import and Export of Wild Fauna and Flora is in the process of final adoption.

In 1993, a State Council Order banned internal and international trade in rhinoceros and tiger parts and derivatives. It further prohibited the trafficking, transport and mailing of such parts and derivatives. The Order also required the registration of all rhinoceros and tiger stocks and removed rhinoceros horn and tiger bone from the official pharmacopoeia. Research on alternative ingredients was encouraged. It is worthy of note that such a ban was initiated before the Conference of the Parties called upon Parties to prohibit internal trade.

It appeared, from discussion the team had with officials, however, that trade in medicines that might contain tiger parts and derivatives would only be unlawful if they were listed among the ingredients.

Provincial regulations govern hunting of Category II state-protected species, whilst the national law manages hunting of Category I species.

Practical Controls

CITES administration

China acceded to the Convention on 8 January 1981 and it entered into force there on 8 April 1981. Two Management Authorities and two Scientific Authorities have been notified to the Secretariat. Several branch offices of the principal Management Authority have been established

in Chinese Provinces. Nation-wide, 130 staff in the head office in Beijing, plus the 17 branch offices administer CITES controls.

Enforcement staff

Enforcement of wildlife legislation is primarily a matter for the 55,000 wildlife staff of the Forest Police Department of the State Forestry Administration. China's Police and Customs officers are also empowered to enforce controls on national and international trade. The team was told that China's Border Army has an awareness of cross-border wildlife controls and can also play a part in enforcement.

Two national committees have reviewed the measures introduced since the 1993 internal trade ban on rhinoceros and tiger. In 1993 alone, inspections were carried out in 27 Provinces and 33,000 markets, department stores and manufacturers were visited. The nation-wide registration of stocks has been completed and stores of stocks have been sealed and subjected to periodic inspection. This includes the 48 tiger skeletons (60 kg of bones) stored at one tiger captive-breeding centre.

Officials in Heilongjiang Province told the team that they visited traditional medicine pharmacies covertly but found no trace of products purporting to contain tiger ingredients. The team visited one pharmacy, selected at random, and found no such products. The same officials said that some tiger bones had appeared in Provincial markets since 1993 but these had been thought to be fakes.

Post Office and Railway Station officials have also assisted in inspections.

The Beijing CITES Management Authority has co-ordinated a number of follow-up investigations, having been advised of seizures abroad of medicinal products purporting to contain tiger ingredients. They told the team that in such investigations, manufacturers visited were adamant that the goods were fraudulent or counterfeit and had not been made by them.

It appeared to the team, however, that Chinese officials were relatively unaware of the many products being seized in other consumer States that regularly are found to have details, albeit perhaps false, of Chinese manufacturers on their packaging. It also appeared that the intelligence of tiger bone smuggling to China, repeatedly told to the team in other range States, was not being communicated to China.

Whilst not discounting the possibility of tiger poaching in China and the smuggling into China of tiger parts and derivatives, the clear impression given to the team by officials was that illicit activities were not a significant problem in the country.

Officials told the team that illegal poaching of endangered species, particularly tiger, was very rare. The Forest Police Department said that only two or three cases relating to tiger came to their notice per year. These included poaching and smuggling of tiger skins and bones. The team asked whether any persons arrested in connection with illicit trade had been interrogated by law enforcement personnel with knowledge of international wildlife crime but were told that they had not.

The Police and Forestry staff regulate gun ownership among the general public and officials did not appear to regard illegal use of weapons as a significant factor in national wildlife crime.

China's involvement in the shahtoosh trade is described elsewhere in the team's report.

Traditional medicine

The team visited the main office of the Beijing Tong Ren Tang Holding Corp., which is China's main and oldest-established traditional medicine manufacturer. The company manufactures over 500 different preparations, using 400 different materials. Two hundred and eighty of their

preparations are in regular production. Of the materials used, 70 per cent are plants, 20 per cent are minerals and the remaining 10 per cent are animal-based.

The company is adamant that all their stocks of rhinoceros and tiger specimens were purchased prior to China's accession to the Convention.

The company told the team that they have fully supported the measures introduced by the government following the 1993 internal trade ban. In particular, the company:

1. stopped purchase of rhinoceros and tiger parts and derivatives
2. stopped sale of products with those ingredients
3. altered formulae and began research to find alternatives
4. registered stocks and sealed the stocks
5. engaged in ongoing monitoring and security of those stocks

The company now has over 3,200 kg of rhinoceros horn and 824 kg of tiger bones in its stocks. Company staff cannot enter the sealed store of stocks unless municipal government officials are present. Since the stocks were sealed in 1993, a total of 8.4 kg of rhinoceros horn, seized by law enforcement officials, has been added to secure stores in China.

The team visited the store in Beijing and was satisfied with the security arrangements and the record of inspections. Whilst the rhinoceros horn which was randomly examined appeared to be in fair condition, it was observed that many of the tiger bones were in a very poor state and seemed to be rotting.

The company estimates the value of stock in the store at CNY 55 million. Without taking the sealed stocks into account, Beijing Tong Ren Tang estimates it has cost the company CNY 30 million in lost revenue and provision of security for the store since the ban was introduced.

Importantly, however, during discussions with the team the company indicated that they regard both rhinoceros and tiger as essential and important ingredients in traditional medicine. It also regards the use of both species as an important part of the heritage of the Chinese nation. Particularly with regard to tiger, this was in direct contrast to the comments made to the team by TM practitioners and pharmacists in other countries. It was also contrary to what the staff of the Beijing Tong Ren Tang pharmacy in London, United Kingdom, had said to the technical team during its mission to that State.

This point was made to the Chinese representatives of the company. Their answer was that it was company policy to publicly express opinions that were in keeping with the location of the premises, i.e. in the case being discussed, Western culture.

Company officials went on to tell the team that they believed that the use of tiger parts and derivatives should be resumed once populations in other range States have stabilized. (The officials apparently ignored, or were unaware of, the likelihood that some wild populations in China may be on the brink of extinction). They believed that China had the ability to monitor the use of tiger products and that captive-breeding of tigers should be expanded to enable such use.

They emphasised their belief that the general awareness of tiger conservation was widespread in China.

The officials said, though, that they would continue research to identify, and evaluate, alternatives to both rhinoceros and tiger ingredients.

The company expressed the wish that the Convention would arrange compensation for its financial losses and provide guidance as to what could be done with the sealed stocks.

Beijing Tong Ren Tang officials told the team that they were of the opinion that counterfeit products, purporting to contain tiger and other endangered species, were common and that they

had heard that these were especially common in Hong Kong. They had no knowledge, however, of their own products being counterfeited.

The team was aware, however, that surveys by NGOs, whilst praising China for the steps it has taken since 1993, have indicated that products containing or claiming to contain rhinoceros horn and tiger bone do apparently remain available from a limited number of retail and wholesale outlets.

The team discovered that products, which at first sight appeared to be tiger bone plasters, were on sale in a duty-free shop in Beijing Airport. On closer inspection, it was found that tiger was not listed as an ingredient but that musk and leopard bone were. There was nothing to indicate to prospective purchasers that the provisions of the Convention applied to such goods. (The Secretariat has subsequently been advised that China has taken enforcement action against the shop.)

Special projects and other matters

China has engaged in several specific initiatives promoting international liaison and co-operation on tiger issues.

A workshop on the traditional medicine trade, held in 1995, led to the Beijing Protocol that China and India signed that year to commit the two governments to joint efforts to combat illicit trade. In 1997, China and the Russian Federation signed a similar agreement. China and Viet Nam have signed a Memorandum of Understanding on cross-border traffic of species. In 1998, China was represented at a regional enforcement meeting, held in Vladivostok, which Japan, the Russian Federation and the Republic of Korea also attended.

The College of Wildlife Resources, Northeast Forestry University, Harbin, has existed for 47 years. It is the biggest such university in China with over 10,000 staff and students. The facility provides a wide range of training in environmental issues and wildlife conservation.

Of particular interest to the team was the Detecting Center of Wild Fauna and Flora, which was established in 1996. The Center acts as a forensic science facility for China's enforcement personnel, as well as conducting considerable research. The Center has created close links with the U.S. Fish and Wildlife Service's forensic laboratory. The Center has a large specimen collection to aid morphological identification of species.

The Center told the team that current demand upon its services from enforcement agencies is approximately tens of cases each year. The staff has yet to give evidence in court, though.

The facility has not conducted any work in relation to tiger bone or products alleged to contain tiger parts or derivatives but hopes to in the future. Although the Center is very willing to make its services available to other Parties, it would require to impose a fee for such work. The technical team **commends** the work being done by the facility and suggests that China provide details to the CITES Secretariat of the range of services available so that these could be publicised via a Notification to the Parties. The team believes that the Center could potentially be of considerable support and assistance to CITES Parties in Asia.

The Government of China currently has an official from its CITES Management Authority seconded to the CITES Secretariat. Part of that person's remit in the Secretariat is to assist with enforcement issues and he was a member of the Tiger Mission technical team during its work in five of the range and consumer States.

Although the team was told that release of captive-bred tigers, as part of re-introduction projects, was under consideration it was unable to obtain clear information as to the progress of such work or the likelihood of releases actually taking place.

The team visited a tiger park near Harbin that is linked to a tiger farm elsewhere in the Province. Both facilities are open to the public. The farm, which pre-dates the park, was apparently originally founded to supplement wild populations and for the commercial production of tiger parts and derivatives. Team members were already aware that China meets its domestic demand for bear parts and derivatives, for use in TM products, by similar farms where bears are kept in substantial numbers.

The tiger park had a number of displays that provide visitors with information relating to the status of the species in the wild and conservation issues. The displays did not, however, refer to China's ban on internal trade. 200,000-300,000 people visit the park annually.

The team learned that, since 1993, 30 tigers have died at the park and the farm. The whole carcass of each of the animals is preserved in deep freeze conditions. The park also has 120 kg of tiger bones in storage, from animals that died prior to 1993.

The team was told that approximately 200 tigers are born in captive-breeding facilities in China each year. The team is wary that such large numbers offer opportunities for the laundering of wild-caught specimens and/or parts and derivatives, if internal controls are ever relaxed. Such captive-breeding also requires strict control to avoid any chance of animals, parts or derivatives entering into the black markets. The team would also draw the attention of China to the comments it makes in the General Observations section of its report, relating to release programmes.

Education and Awareness

Enforcement and administrative staff

The Government of China has provided training for CITES staff, Police and Customs officials. Five hundred persons have received such training. Additionally, 160 persons have attended training seminars organized by the CITES Secretariat and other international organizations.

The general public

Since the 1980s, China has conducted campaigns related to raising wildlife conservation awareness.

The CITES Management Authority, together with the International Fund for Animal Welfare, has recently designed leaflets relating to international wildlife trade, for distribution at airports and on airlines.

However, following the ban on internal trade in rhinoceros and tiger parts and derivatives in 1993, a State Council Order was published and the Ministries of Forests, Public Health and Customs all issued notices of the ban. News of the prohibition was broadcast widely by all media agencies.

In 1998, the Chinese Year of the Tiger, and often linked to the anniversary of the trade ban, several government agencies engaged in tiger conservation education and awareness campaigns. For example, in the city of Shanghai alone, it is estimated that 13 million residents were exposed to the campaigns. Over 700,000 young people in the Shanghai area, including 200,000 primary and middle school pupils, participated in a Save the Tiger campaign. Speech, poster, drawing and photograph contests attracted over 9,000 entries. The Wildlife Conservation Society (an NGO based in the United States of America) assisted in funding the campaigns and over 100,000 copies of campaign material were distributed. It was the experience of campaign organizers that awareness among young people was an effective route to also reach adult populations.

Similar initiatives took place throughout the country.

Aspects for Improvement

As a result of its mission, the technical team has no doubt that the Government of China is committed to implementing its internal trade ban on tiger parts and derivatives and to combating international trade. It is clear that very substantial efforts have been made, especially during the Chinese Year of the Tiger, to raise public consciousness of the need for tiger conservation. The team **commends** the imaginative approaches that have been taken to the latter subject. Such efforts are not widely known abroad but deserve to be so.

Of very real concern to the technical team, however, is that the demand for use of tiger parts and derivatives remains apparent. It would appear that there is a fervent hope in at least one significant sector of the TM trade that the ban will be temporary. The team believes that such openly expressed opinions might undermine the efforts being made by the Chinese authorities, especially CITES Management Authorities, to publicise to the rest of the world that the State is no longer a willing importer of tiger parts and derivatives. This concern is strengthened by the fact that stockpiling of dead tigers and their parts is taking place.

The team, pursuant to Resolution Conf. 9.13 (Rev.), "RECOGNIZING also that long-term solutions to the protection, conservation and management of the tiger and its habitat require the adoption of bold and unprecedented actions", **suggests** that China consider taking actions to reinforce the public message that it is no longer a consumer State. One possible action would be the destruction of all current stocks of tiger parts and derivatives and, for the foreseeable future, the destruction of any stocks as they are accumulated.

Whilst it acknowledges that this may be through no fault on their part, the team believes that Chinese authorities, particularly enforcement agencies, may not have an adequate appreciation of international wildlife crime. It also believes that there are reasonable grounds for suspicion that illicit trade in endangered species remains a problem in parts of China.

The team **recommends** that China seek out intelligence from other range States that indicates that it is either the origin of, or the destination for, parts and derivatives of tigers (or any other illicit trade in specimens of CITES-listed species). The technical team also **calls upon** all range and consumer States to supply information to China that will assist its enforcement agencies in combating illicit trade.

The team **suggests** that the network of CITES branch offices throughout China could play a greater role in enforcement activities, particularly by supplying CITES expertise and practical assistance in support of full-time enforcement personnel.

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens and that they co-operate with other enforcement agencies. The team **recommends**, however, that such units should primarily have an investigative and co-ordinating role, perhaps at Provincial level, to combine operational activities against organized poachers, illicit dealers, traders and smugglers with intelligence-gathering work. It does not envisage such units conducting anti-poaching patrol work. The units should be empowered to call upon the services of other enforcement personnel whilst co-ordinating intelligence-driven operations. It should be a priority for the units to seek out information relating to illicit dealers and traders, their markets and routes, and take enforcement action against them. The team notes that such units may require donor funding to enable them to be equipped with the appropriate technical equipment commensurate with the job expected of them. The team also notes that external assistance may be required to provide specialized training for such units.

Additionally, the team **suggests** that a similar, although primarily supervisory, co-ordinating unit be established at State level. It should include representatives from the main enforcement agencies and should be empowered to direct intelligence-driven operations at national level. It should also be responsible for liaison with counterpart enforcement agencies abroad.

The team **encourages** China to continue to provide general training to CITES administrative and enforcement staff and acknowledges that external funding and practical assistance may be required to enable this to be achieved.

INDIA

Tiger conservation issues

Perhaps more than any other range State, India has been the subject of government and many NGO projects to conserve tiger populations. The best known of these, Project Tiger, has been running since 1973. Its Director, a government official, oversees the implementation of India's National Tiger Action Plan.

Habitat

There are currently 25 different protected areas that form a network of Project Tiger Reserves throughout the country. The Forest (Conservation) Act 1980 prohibits State governments from allowing forest areas to be used for non-forestry purposes without the prior consent of the Government of India. NGOs have, however, taken court action on several occasions to force States to stop commercial activities, other than forestry, in protected areas (including within and on the immediate outskirts of tiger reserves).

Officials estimate that 40 per cent of India's one billion human population live in forest areas and, understandably, seek to use the natural resources of the area. Further, it is estimated that some 80 million cattle graze in India's forests.

Population studies

Federal and State government officials, together with NGO staff, are all engaged in relatively regular population surveys, using a variety of methods. Official figures place the total population of tigers in India at approximately 3,500. Some NGOs believe the actual figure may be considerably less, perhaps 1,000 fewer.

The team witnessed the annual population survey in one reserve that employed reserve staff in hides to monitor watering holes. Over a 24 hour period, staff recorded all animals coming to drink. Plastercast impressions of tiger pugmarks were also taken. The team is wary that such an approach may over-estimate numbers of tiger prey species as the same animals may be recorded more than once over the course of 24 hours and staff may not differentiate sufficiently between individuals. The same, to a lesser degree, might be true of tiger numbers, especially if pugmark records are not assessed accurately.

Conflict

India has a long history of conflict between man, his livestock, and tigers. The Sundarban region in the south east of the country is famous for tiger populations that apparently actively seek out and routinely include *Homo sapiens* as a prey species. One of India's best known National Parks, Corbett, is named after a man who became legendary for his skills as a hunter and killer of man-eating tigers. The very significant tiger and human populations led to regular conflict between the two species and the same remains true today, albeit to a lesser degree.

India was also, historically, regarded as the Mecca of wild tiger hunting. Such activities are now banned.

Six of the 25 Project Tiger Reserves no longer have any villages inside their boundaries and both officials and NGOs see this as the ideal scenario. However, governments and NGOs also recognize that finding alternative sites for other villages, and persuading the residents to

relocate, is extremely difficult in a country where demand for land is already high. Each relocated family will expect to be provided with two hectares of land and a financial compensation package.

Compensation schemes are not present on a national basis, although the team was told of some states where an owner would receive INR 2-5,000 for cattle killed by a tiger. It has been proposed that a government scheme commence where the family of a person killed by any wild animal would be paid INR 100,000. The team was also told, however, that it is estimated that every year in India 20,000 people die from snake bite, 160 are killed by elephants and 8-12 are killed by tigers. Consequently, there is resistance to the introduction of such a scheme.

Legislation

India's Wildlife (Protection) Act of 1972 controls hunting of animals and makes poaching of tigers an offence punishable by imprisonment to a maximum of 7 years and provides for fines of up to INR 25,000. Possession of any part of a tiger or other Schedule 1 animal is prohibited. The 1972 Act places the onus on a possessor to demonstrate that an item is not part of a Schedule 1 species. The team was told that this might be used to address issues of packaging and labelling of specimens.

Whilst the 1972 Act is the primary piece of legislation used to protect wildlife and control trade, it does not implement CITES. Customs law regulates imports and exports.

A draft amendment to the 1972 Act, to incorporate CITES provisions, has apparently been prepared.

The Act also allows for the designation of Protected Areas for wildlife.

The State of Jammu and Kashmir does not use the 1972 Act but has its own legislation. This is only of relevance to trade in shahtoosh (described elsewhere).

Practical Controls

CITES administration

India ratified the Convention on 20 July 1976 and it entered into force there on 18 October 1976. Seven Management Authorities and three Scientific Authorities have been notified to the Secretariat. Management Authorities in New Delhi, Madras, Bombay and Calcutta each have a responsibility for enforcement issues within the States covered by these regional offices. India does not allow commercial export of wildlife.

Enforcement staff

Wildlife Wardens, Forest and Wildlife Department staff, Customs, Coastguard, State Police, the Border Security Force, Indo-Tibetan Border Police, the Central Reserve Police Force, Directorate of Revenue Intelligence, Central Bureau of Investigation, Railway Protection Force and the Foreign Post Office are all regarded by officials as potentially having a role in combating poaching and/or illicit trade.

Whilst some, or all, of these officials may actually become involved, to a greater or lesser degree, the team saw little evidence of national co-ordination between the various agencies.

The primary role for wildlife protection falls to the Forest Guards, Foresters and Forest Rangers of the Forest Department, although Wildlife Officers and the Police in each State are empowered under the 1972 Act. Each district in a State will have at least one Wildlife Warden to overview enforcement. Whilst the Government of India has legislative power and provides guidance on enforcement, co-ordination of enforcement and policies are set by each State, which will also decide upon the priority allocated to wildlife law enforcement.

The team was told by officials that India's northeast region, incorporating 7 states, is regarded as having unstable and militant elements that make wildlife law enforcement particularly difficult. India's economic problems have produced a situation where there has been a stop on recruitment and 40 per cent of all Forest Department established posts remain unfilled.

All enforcement personnel may call upon the forensic services of the Wildlife Institute of India at Dehradun. Its assistance is regularly provided in the examination of tiger skins that are suspected to be fakes. The Institute assists in specialized and general training for enforcement staff.

The team was told, both by officials and NGOs, that a much greater involvement on the part of the Police has been noted in recent years. Further, it had been observed that detachments of the Central Reserve Police Force (CRPF) had proved particularly effective when they were deployed to patrol one protected area. An officer from the CRPF informed the team that his staff welcomed the opportunity to become involved in wildlife law enforcement and that there was now a greater awareness of illicit wildlife trade among the Police in general.

The team was impressed by the apparent level of awareness displayed by the Directorate of Revenue Intelligence whose remit is closely connected to anti-smuggling work and Customs operations. The Directorate appeared to have a good knowledge of the modus operandi of contraband dealers but the team noted that it is restricted to operating in Customs areas. An official from the Directorate said it would welcome greater liaison and communication with other countries.

The team is of the opinion that the determined nature of some forms of environmental crime, as evidenced by the fact that approximately 50 Forest Guards are killed each year during anti-poaching/illegal logging operations, requires an equally determined response. The team heard that too few patrol personnel are armed. Even when they are, some people (including the Director of Project Tiger) feel that personnel do not receive sufficient weapons training. By comparison, it is estimated that enforcement personnel kill 8-12 poachers annually.

The team heard of some States where enforcement personnel have been subjected to sustained harassment, threats and violence from both persons engaged in wildlife crime and persons involved in commercial operations in protected areas.

Bonus schemes for operational staff have been introduced and the Ministry of Environment and Forests (MEF) is arranging insurance cover for its guards and aims to increase the salaries of anti-poaching personnel. It also hopes to increase the number of CITES regional offices and overall staff numbers.

MEF officials told the team of plans for a Commission to ensure that wildlife budgets in Indian States must be used for that purpose and must not be diverted to other uses. Centrally-allocated funds may now go direct to enforcement units and not via State bureaux. The team **commends** these initiatives, especially as they address points of concern raised by NGOs both in India and abroad. The team heard from many sources, both inside India and from foreign NGOs that have attempted to provide support, that bureaucracy all too often seems to stifle or delay progress. One senior Indian official told the team that government practices had changed little since the time of Independence and did not suit current demands upon them.

The team also heard from various sources that India, due to the severe poverty throughout the country, inevitably suffers from some of the corruption and collusion problems that such socio-economic factors may produce.

The team noted the work being done by NGOs in support of the enforcement authorities. For example, TRAFFIC India maintains a database on wildlife crime and criminals and has an informant network. In particular, however, the team **commends** the activities of the Wildlife Protection Society of India (WPSI) that takes a lead in providing assistance in a variety of ways.

The team regrets, though, that WPSI seems, all too often, to be plugging gaps as well as providing assistance.

The team heard repeatedly of the control difficulties presented by the huge borders that the country has, some of which were described as porous. Liaison and communication with counterpart officials in neighbouring countries appears to be very good in some places but fragmented in others.

The judicial system

The team repeatedly heard concerns, from both officials and others, of the very considerable delays in India's court systems. Indeed, the entire system seems to be labouring under demands that its resources simply cannot cope with. It is not at all unusual for cases to take many years to reach a conclusion. Similarly, accused persons regularly obtain bail, even in cases involving serious charges and when the accused may already be on bail for other alleged offences. There have also been reports of evidence disappearing prior to cases reaching court, resulting in prosecutions being halted.

Officials and NGOs also note that it has become increasingly common for offenders, when caught, to immediately lodge counter-allegations against enforcement staff. Complaints of brutality, wrongful arrest and falsification of evidence are regularly made against Forest Department staff and Police officers. The length of time that it takes to settle matters in court means that there is little to deter malicious complainants. Such action causes considerable stress to enforcement personnel and does little to motivate them to continue their efforts.

The authorities, or indeed NGOs, may wish to consider taking court action (either civil or criminal) against malicious complainants in an attempt to eradicate, or at the least deter, such behaviour. Whilst not wishing to add to an already high court workload, the team knows that type of response to have been successful in other parts of the world. It is essential for good management and motivation that enforcement officers feel that they enjoy the support and backing of their employers and others.

The team learned that many wildlife law prosecutions are undertaken by NGOs, particularly the Wildlife Protection Society of India, because official prosecution authorities are so overburdened.

India, in an attempt to alleviate the general court system and in recognition of the seriousness of those crimes, has introduced special courts to handle drug cases. The team **agrees** with comments made to it that special wildlife law courts should also be considered.

Illicit trade

Many people in the field of tiger conservation agree that it was in India that the seriously high levels of illegal killing of and trade in tigers were first appreciated, which prompted the global concerns of the present time.

Regrettably, from the cases related to the team by officials and NGOs, it appears that routine and regular tiger poaching and trade in its parts continues. There are many excellent examples of seizures of specimens and arrests of poachers, dealers and traders but the team was repeatedly told that these are too few and, often, too late.

The team formed the clear impression that the lack of human resources, the lack of sufficient logistics, the size of the tiger habitat to be patrolled, the length of the borders where smuggling can take place and problems in the judicial system all combine to produce an insufficient deterrent to those inclined to engage in illegal activities.

Further, the fact that the demand for endangered species seems so well recognized among the general public appears to have produced a situation that led to the team being told of the discovery of, for example, fake tiger skin and rhinoceros horn, more in India than in any other

range State. Even dog skins have been painted to resemble tiger skins and successfully sold as such. The team was told that there is intelligence to suggest that the faking of skins has actually become a local industry for two villages.

The team also heard from officials and others that organized groups and trade routes are believed to exist that handle specimens of endangered species from their illegal taking to their smuggling across the country's borders to foreign destinations. Bear, rhinoceros, elephant, musk deer, leopard and tiger specimens are all regarded as entering into illicit international trade. Importantly, the team was told that several CITES Assistant Management Authorities had knowledge of intercepted shipments that had been found to contain other illicit goods, apart from endangered species. Narcotics had often been encountered.

Pangolin is also seen by officials as a target species, their scales having been noted as being smuggled to the Middle East for use in necklaces and armlets.

India appears to have a domestic market for exotic pets and the team was told, in particular, of illegal imports of birds from Africa.

Frustratingly, India appears to lack sufficient enforcement infrastructures to enable targeted follow up to seizures and/or arrests. The team did hear, however, that reward schemes are in place to encourage the supply of information to the authorities.

Officials and NGOs agree that wildlife crime is often opportunistic, however, and that poaching of tiger prey species and revenge killing of tigers are also impacting upon wild populations. Indeed, the latter aspect may be as great a threat to tiger populations as poaching to supply the commercial trade in tigers and their parts.

India's involvement in the shahtoosh trade is described elsewhere in the technical team's report.

Traditional medicine and other uses

India's indigenous human populations have a limited history of using TM products containing tiger ingredients but there is considerable cultural use of tiger parts and the team is wary that some officials do not give this aspect sufficient attention.

Tiger skins, claws and whiskers are all prized for decorative, charm and power symbol purposes. Although becoming less popular, the presence of a tiger claw in a locket worn by ladies who could afford one has long been a tradition in India. As in some other range States, the tiger is an important symbol in religious beliefs and legends. The team heard that there might still also be some cultural use of tiger fat in balms and potions.

Both intelligence and actual seizures do clearly indicate, however, that significant amounts of tiger specimens are smuggled abroad and that China is still regarded as the most common destination. Interestingly, though, it does not appear to be widely appreciated in India that China banned domestic use of tiger products in 1993. The team **suggests** that this fact be better publicized as it might assist in convincing criminals that the potential market for their ill-gotten gains ought to be very limited.

Interestingly, officials have noted that whilst most parts of the tiger will be seized during interceptions of illicit shipments, whiskers are seldom encountered and it is presumed that the domestic market absorbs all those parts.

Education and Awareness

Enforcement staff and the judiciary

TRAFFIC India and the Wildlife Protection Society of India have both produced guides and handbooks for enforcement staff. Although quite simple in format and approach, both

publications contain essential and practical advice and information. The team **commends** the publications and believes they offer excellent examples that could readily be copied and/or adapted for use in other range States. Whilst both, understandably, focus on India they contain many sections that only require translation before being suitable for distribution in other Asian countries.

Importantly, operational staff commented favourably on the manuals.

Almost without exception, however, officials and NGOs felt that considerably more work requires to be done to increase awareness of wildlife crime and CITES in the agencies that have an enforcement remit. It was suggested that training is particularly badly needed for the multi-agency personnel at border checkpoints.

The team heard from both officials and NGOs that considerable scope exists for raising awareness among the judiciary of wildlife crime issues. Indeed, it heard that some courts/judges did not even have copies of the relevant legislation.

The team believes that there is also scope for increasing awareness of international illicit trade and that this could help Indian authorities in profiling and targeting measures.

The general public

Immigration forms issued to departing and arriving passengers include warnings that trade in wildlife is illegal. The team noted that large posters with information relating to international wildlife trade controls were on display at Indira Gandhi International Airport, New Delhi.

Several NGOs, both Indian and foreign-based have engaged in education and awareness campaigns. The team learned of one interesting recent initiative in Mizoram State, which borders Myanmar, where a Christian religion NGO has run a campaign where almost 100 per cent of the population has signed an undertaking not to kill wild animals, even though there has been a strong tradition of poaching. It will be interesting to see the success of that project in the long-term.

The team was told of a project in Ranthambore where an NGO had attempted to alleviate pressure on natural resources by providing villagers with good quality dairy cattle. It was intended that milk production could then be used to generate income for the residents so that they would not have to exploit the habitat or engage in illegal hunting. The project had not succeeded, however, and the team was told that this mainly resulted from a lack of ongoing support from local officials and government.

Indian NGOs have had conservation successes, however. The team learned of the work of Tarun Bharat Sangh, which assisted villagers in a project to rejuvenate the drought-stricken Ruparel river basin in Rajasthan. This led to better water, agriculture and animal rearing. The benefits helped relieve pressure on local forests and encouraged communities to value their habitat and gain from it in an organized and managed manner.

The team was told by both official and NGO sources of a feeling among persons in the Indian conservation community that an insufficient percentage of the funds raised globally to aid tiger conservation comes to India. It was said that this hampered in-country efforts on education, awareness and field conservation initiatives. In contrast, the team heard from non-Indian NGOs that they were increasingly anxious about sending funds to India because they felt the money might not reach where it was needed or that too much was taken up in administrative costs.

Aspects for Improvement

The team recognizes the major socio-economic problems facing India. They are not, however, in any way peculiar to that country and the very same difficulties face many other tiger range States. The team acknowledges, though, that India's problems are aggravated by the massive size of the country

and its population. The team agrees with the comment by one NGO that one of India's strengths is its willingness to talk openly about its problems.

Several officials and NGOs called upon the team to emphasize in its report the need for consumer States to tackle demand for parts and derivatives of tigers. Whilst the team accepts such comments to be fair, to a large degree, it believes that there might not be an adequate appreciation in India of just how much effort many consumer States are making. This may simply be yet another example of the lack of international communication. The team is anxious, however, that India does not ignore the vital role it too must play in tackling poaching and illicit trade across its borders. Combating illicit killing of and trade in tigers must be a joint effort among all Parties to CITES, if success is to be achieved.

The team agrees with the head of the CITES Management Authority of India that his country has a potentially strong powerbase. The team met with many persons who displayed admirable dedication, enthusiasm and commitment to enforcement and conservation. It is wary, however, that bureaucratic structures impede co-ordinated progress by such people.

The team **encourages** India to continue its efforts to draft new legislation and recommends that the CITES Secretariat should assist by reviewing the draft, once available. It **recommends** that any new legislation should take account of Resolution Conf. 9.6.

The team **encourages** India, with donor funding if need be, to expand and develop anti-poaching work in protected areas and to provide field personnel with appropriate logistical support to enable them to perform their duties effectively.

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens and co-operate with other enforcement agencies. The team **recommends**, however, that such units should primarily have an investigative and co-ordinating role, perhaps at State level, to combine operational activities against organized poachers, illicit dealers, traders and smugglers with intelligence-gathering work. It does not envisage such units conducting anti-poaching patrol work. The units should be empowered to call upon the services of other enforcement personnel whilst co-ordinating intelligence-driven operations. The team notes that such units may require donor funding to enable them to be equipped with the appropriate technical equipment commensurate with the job expected of them.

Additionally, the team **recommends** that a similar, although primarily supervisory, co-ordinating unit be established at federal level. It should include representatives from the main enforcement agencies and should be empowered to direct intelligence-driven operations at national level. It should also be responsible for liaison with counterpart enforcement agencies abroad. The team **suggests** that such a unit should oversee any covert operations conducted against wildlife crime.

The team **commends** the imaginative approach of some national NGOs to involve local communities in conservation and to enable them to benefit from natural resources or, where this is not possible or appropriate, to provide alternatives that will help alleviate pressure on fauna and flora. It **encourages** the Government of India, and potential donors, to assist such projects.

INDONESIA

Tiger conservation issues

Habitat

Indonesia is regarded as having substantial areas of tiger habitat but degradation and encroachment are viewed as major problems by officials and NGOs. Habitat loss is seen as increasing the number of tiger conflict cases and reducing the opportunity for population

expansion. For example, even in Way Kambas National Park, where there appears to be a healthy and relatively well protected resident population, field workers are concerned that the genetic viability is being impaired by the small size of the genetic pool and through the lack of links to other isolated populations.

Population studies

The Sumatran Tiger Project, a joint action between the government and NGOs, established camera traps throughout Way Kambas National Park. In a four year period to 1999, the Project acquired extensive photographic records of resident tigers and their prey species. This approach has enabled stripe pattern analysis to be used to differentiate between individuals. Some 37 separate tigers have been identified over the course of the four years.

The geographical spread of the cameras has also allowed global positioning satellite systems to be used to create databases of populations, territories and the distribution of species throughout the Park.

Although labour intensive to install and requiring an ongoing manpower commitment to refresh batteries and change camera film, this exercise has allowed the collection of an extremely impressive range of data. Importantly, the information collected can clearly be seen to be methodical, scientific and accurate. The team **commends** the Project and **recommends** its extension in Indonesia and use by other Parties wherever habitat is deemed suitable.

Conflict

Conflicts between humans, their livestock and tigers are relatively common, especially in Sumatra. There is no government compensation scheme. No response is made to conflict cases occurring in protected areas or national parks since people are not allowed to live or graze livestock there.

Outside such areas, capture and re-location will always be the first line of response. The majority of captured tigers are taken to a major captive-breeding project on the island of Java where 32 male and 29 female adult tigers now live. This facility co-operates with captive-breeding projects elsewhere in the world, especially with large zoos. All captive tigers have been the subjects of DNA profiling.

The captive-breeding project is part of a larger Indonesian Tiger Strategy, established in 1994, which addresses habitat, conservation and conflict issues. Indonesia's CITES Scientific Authority actively participates in Strategy decision-making processes.

Conflict remains a major motivating factor in persecution of tigers, however. Eleven people were killed in one province in Sumatra in 1998 and 6 conflict cases occurred in one Sumatran province in just one month in 1999. It is not uncommon for villagers to respond by attempting to poison the tiger involved.

Field workers note that conflict cases often involve young, healthy male tigers. It appears likely that these young adults are seeking out their own territories, having left the other family members. Unable to find sufficient space within the protected area or national park, they stray into surrounding areas where they encounter humans and their livestock. Researchers believe that such conflict cases are inevitable, given the restricted sizes of available habitat, which do not allow young males to create their own territories. Neither are there any habitat 'corridors' to enable such animals to move elsewhere without posing a threat to surrounding human communities.

Legislation

Indonesia's domestic law, Regulation of the Government of the Republic of Indonesia, Number 8, Year 1999, of the Utilization of Wild Plants and Animal Species, has recently been analysed by the

CITES Secretariat and has been judged to enable the country to implement the provisions of the Convention.

Regarding Indonesia's law relating to TM products, it does not take account of the recommendations in Resolution Conf. 9.6 but does make the possession of protected animals and recognisable specimens an offence.

Practical Controls

Indonesia acceded to the Convention on 28 December 1978 and it entered into force on 28 March 1979. It has notified the Secretariat of one Management and one Scientific Authority.

Enforcement staff

Indonesia has a substantial number of Forest Ranger personnel spread throughout its provinces, who are under the control of the Department of Forestry and Nature Conservation (DFNC). These include specialist 'Jagawana' who, together with Forest Police and Investigators, tackle poaching and other forms of wildlife crime. Field units have access to speedboats, pick-up trucks, motorbikes, rifles and revolvers. The total strength of personnel who could potentially be involved in enforcement is intended to be raised to some 15,000 in the near future.

Undercover operations are permitted. DFNC staff appears to enjoy a relatively good working relationship with the Police, Customs and Army. DFNC staff who detain offenders are obliged to pass them over to the Police. The Police will thereafter initiate prosecution procedures. Indonesian Customs officials have made a number of significant seizures of illicit imports and exports. All CITES shipments have to be inspected prior to export.

The team learned, however, that the public does not hold the position of Forest Ranger in particularly high esteem and it appeared that lack of motivation among enforcement staff might be a problem. Senior officials acknowledged that there seems to be evidence of collusion between some staff and illegal traders.

The team was told that when front-line enforcement actions do take place, the judicial process can thereafter be very slow. Where convictions occur, poachers and dealers who are at the beginning of the trade chain seldom receive penalties that act as a deterrent. It also learned that some cases seem to be lost before reaching court, either because of bureaucracy or, it alleged, through corrupt practices by officials.

Illicit trade

The team was told by officials that European and Japanese tourists are targeted by local traders in live mammals and birds. Sale to foreign sailors and fishermen, especially from Thailand, is regarded as commonplace. The illegal capture and sale of orang utans is regarded as a major problem.

A substantial domestic market in exotic pets exists, as does an interest in stuffed and mounted specimens and skins. The Indonesian Government initiated a registration scheme in the early 1990s. By 1993, 68,746 people had registered their possession of 58,657 live specimens and 58,106 dead specimens. Over 1,000 dead tigers were included in these figures.

Domestic interest in tiger skins and mounted tiger specimens, for decorative purposes, remains high and NGOs have noted specimens openly offered for sale in newspaper advertisements, even though such sales would be unlawful. Prices of IDR 3-5 million for a good quality skin have been quoted on the black market.

Field personnel, investigators and NGOs told the team that intelligence indicates that the disposal of poached animals may well be influenced by geographical considerations. Poachers and dealers with ready access to points of export may smuggle specimens to international routes

and markets, whilst others will simply sell illegally obtained animals and parts on domestic markets. It was acknowledged that although tiger bones and penises continue to be exported illegally, there appears to be a ready market for domestic use.

The team was told that Indonesian shamans and priests continue to prize the possession of tiger skins, or pieces of skin, and that possession indicates power.

The team had the opportunity to visit the Pramuka Market in Jakarta that is primarily a bird market. Signs at the entrance to the market emphasized that the sale of protected species was illegal. Despite this, within a short time of their arrival, team members were approached by individuals carrying specimens and were encouraged to enter an area at the rear of the market where a range of animals and birds, including reptiles, slow loris, monkeys, leopard cat kittens, otter cubs, porcupines, parrots and cockatoos were on display. So too was a Javan hawk eagle (CITES Appendix I), even though that particular species was illustrated on signs at the market entrance relating to the most endangered and protected species. Although they did not see them, the team was also offered sun bear and orang utan.

The team noted, though, that the physical layout of Pramuka Market was an excellent example of the difficulties that enforcement staff faces. With its narrow, congested and dark myriad of alleyways, dealers would be difficult to approach unobserved and the sheer number of traders there and animals on sale would require the presence of considerable numbers of enforcement personnel to have any chance of making arrests and seizures. Instead, the team was of the opinion that covert surveillance operations, combined with the capture of dealers and their goods either on their arrival at or departure from the market, would be much more effective. Effective covert operations at such venues would also provide substantial intelligence-gathering opportunities.

The brazen and open approach to team members by traders indicated that enforcement of the law is not common or feared.

Traditional medicine

Indonesia's population continues to make considerable use of local traditional medicines, primarily derived from plants. Animal products do also feature among the ingredients, though, particularly in rural provinces, where tiger bones continue to be used in preparations. Tiger meat is also viewed as an effective treatment for rashes and allergies. The eating of tiger muscle tendons is traditionally seen as providing strength. Tiger bones are boiled and medicines prepared that will then be used to treat rheumatism. Whilst the majority of medicines are made domestically, there are also imports from China. Indonesia also exports some traditional medicine products. There appears to be no data to measure the extent of the use of tiger parts in traditional medicine.

Special Projects

As part of the Sumatran Tiger Project, and funded by NGOs, specialist anti-poaching units have been formed in Way Kambas National Park. Teams of locally recruited personnel, each led by a DFNC staff member, have received extra training and equipment to enable them to undertake targeted patrols of areas known to suffer poaching pressure. Paid more than normal DFNC personnel, to increase their motivation, the patrols also monitor and maintain the camera traps described earlier. One hundred and ten captures of poachers and/or traders took place over the course of one year.

This initiative closely follows the example of the specialist Rhino Units that have been deployed in some national parks to combat poaching and illicit trade. Demand for rhinoceros horn, both for illegal domestic and international markets remains high.

To cover the equivalent size of terrain the Tiger and Rhino Units have a personnel ratio of 1:6 compared with DFNC staffing but have a detection ratio of 6:1. Co-operating closely, the Tiger

and Rhino Units also seek to gather intelligence on poachers, dealers and the illicit trade methods and routes. They also work together in the removal of traps located in protected and park areas.

Although the majority of poaching appears to be carried out by local persons, intelligence suggests that more organized professional poachers are also involved. Trapping, using pits and snares, is the usual method and 85 such traps were located by the Way Kambas patrols in one six month period. During that time, three tigers were trapped. Covert surveillance of discovered traps has proved an effective method of arresting poachers.

The Units believe that as many as 20 tigers each year may be poached in one Sumatran province. Where specialist units are not present, poaching is seen by several individuals that the team contacted as a major threat to tiger populations.

The team **commends** the work of these Units who operate in difficult, hazardous and physically demanding terrain. The combination of effective enforcement, crime-intelligence gathering and maintenance of scientific data collection is laudable.

Education and Awareness

Indonesia's Centre for Reproduction of Endangered Wildlife, which also features a safari park within its facility, has worked with the government and NGOs to help raise awareness of conservation issues.

The specialist Tiger and Rhino Units also seek to raise awareness among residents in areas surrounding national parks.

The Indonesian Tiger Strategy incorporates a forum with a large representation from the media to address awareness.

Material had been prepared to increase education relating to endangered species ingredients of traditional medicine products. Messages were provided in Chinese, for the benefit of ethnic Chinese populations. Unfortunately, political decisions that prohibited the display of Chinese in public prevented the material from being used. The team noted, however, that that restriction has very recently been withdrawn.

It seems that Indonesia's internal political difficulties have prevented any significant governmental education or awareness projects. Many of the officials spoken to by the team were eagerly awaiting a period of stability following the elections that were to take place in mid-1999 and expected that it would be possible to then have clearer guidance once the environmental policies of the next government became clear.

Aspects for Improvement

Indonesia appears to have suffered a relatively lengthy period of political difficulties, together with civil unrest in some areas. International media reports also suggest significant corruption at very senior levels of government and that this has led to the over-exploitation of some natural resources. Understandably, such a climate is not conducive to high levels of motivation among government officials and enforcement personnel. The severe financial problems facing the country have also resulted in relatively poor levels of pay, equipment for enforcement and project funding.

That said, the team encountered many dedicated individuals and saw excellent examples of specialized work. There is clearly a base upon which initiatives can be built and expanded.

In particular, the team **recommends** that the concept of the specialist Tiger and Rhino Units should be widely expanded to encompass other areas of the country. It believes, however, that the reliance upon NGO support, management and leadership of these schemes is open to being interpreted as an abdication of governmental responsibility and that this should be addressed.

The team **recommends** that the government work towards raising the status and increasing the authority of DFNC enforcement staff. Specialist units should not only target illegal activities in the field but their role should be expanded further into intelligence gathering and the combating of illicit trade. The team believes that there is scope for such units, with the provision of suitable training and powers, to deal direct with prosecution authorities, thereby removing the potentially unnecessary involvement of the Police. Alternatively, the routine involvement of Police officers in working alongside specialist DFNC staff in combating wildlife crime could be utilized.

There appear to be sufficient grounds to suspect that significant illicit trade of Indonesia's fauna and flora, to domestic and international markets, is taking place. Enforcement authorities require to evaluate this trade, it is **suggested** covertly initially, and then take clear and effective action against it. The open nature of the trade noted by the technical team suggests that few deterrent factors are operating at present.

Combined with the above recommended enforcement, the team **suggests** that fresh education and awareness campaigns, targeted at the general public, enforcement authorities and the judiciary, should be conducted.

Indonesia is a major CITES trading State. In common, however, with many other Asian countries its rural populations may well not benefit from, and thus not value, surrounding fauna and flora in a lawful manner. Eco-tourism might be one way of providing benefits.

The team **believes** that a new government in Indonesia has an excellent opportunity, hopefully in combination with a recovering economy, to establish higher priorities for conservation. The country clearly has important populations of tiger, and other species, which require protection and management.

JAPAN

Tiger conservation issues

There are no wild tiger populations in Japan. Japan has a long history of providing financial assistance to the Convention and to conservation projects in developing countries and those with economies in transition.

In 1995, the authorities in Japan established a Plan for Domestic Measures for the Protection of Tigers and Rhinoceros. The plan includes the following measures:

1. Dissemination of information on the status of tiger and rhinoceros populations
2. A survey of the use of traditional medicines
3. Distribution control of traditional medicines purporting to contain tiger and rhinoceros
4. Importation control of medicinal products purporting to contain tiger and rhinoceros from abroad by individuals
5. Transition to alternative medicinal products

An NGO brought to the attention of the team, however, the activities of a tiger farm in Japan, that was allegedly established in 1980 with the apparent aim of breeding Siberian/Amur tigers in captivity. At one time open to the public, the farm had advertising material that indicated its intention to engage in the production of tiger bones for medicinal uses and also advertised tiger fur.

Evidence is conflicting as to how many tigers have lived, died or been born on the farm. It is not clear what commercial activities have taken place, or are currently taking place, there and the team learned of the farm's existence too late to attempt to visit the premises.

The technical team **recommends** that the authorities of Japan investigate the activities of this facility. In doing so, it has in mind the concerns expressed elsewhere in its report that unregulated captive-breeding of tigers offers an opportunity for the laundering of wild-caught specimens and/or the introduction to black markets of parts and derivatives from such facilities. (Japan has subsequently advised the Secretariat that its Police are conducting enquiries.)

Legislation

Japan implements CITES through its Foreign Exchange and Foreign Trade Law. The Law for Conservation of Endangered Species of Wild Fauna and Flora (LCES) is used to regulate internal trade. Tigers are designated as International Endangered Species under the law.

LCES regulates parts and derivatives but only as far as they are 'recognisable'. Organisms and other parts that are difficult to identify by their appearance are not subject to regulation.

In the case of tigers, bodies, fur skin, teeth, claws, fur products, skin products, tooth products and ornaments made of claw are regulated under LCES. Meat, internal organs and bones of tigers are not regulated. Therefore, Japan is the only CITES Party in East Asia that allows domestic trade in medicines containing, or claiming to contain, tiger parts.

Offences against LCES can be penalised by fines to a maximum of JPY 1 million and imprisonment not exceeding one year.

Legislation in relation to pharmaceutical products states that the import of drugs to Japan require a permit. Legislation then controls further licensing, standards, labelling and instructions for use. It also provides for intensive inspection of the pharmaceutical industry and regulates false or counterfeit labelling of products. It appears, however, that the enforcement of such legislation is not a practical means of regulating TM products, firstly because they may not come within the definition of 'drugs' under the law but also because it may not be possible to determine, scientifically, what the ingredients are. Interestingly, if a product is thought to be long lasting, a date of manufacture or 'shelf-life' is not required on the packaging.

Practical controls

CITES administration

Japan acceded to the Convention on 6 August 1980 and it entered into force there on 4 November 1980. Japan has notified five Management Authorities and four Scientific Authorities to the Secretariat. Additionally, 13 regional offices are authorised to issue export permits for plants.

Enforcement staff

Enforcement of the law in Japan is primarily a matter for Customs and the Police and they are the only enforcement agencies empowered under legislation. Customs officers enforce the import of specimens of CITES-listed species at the border under the Foreign Exchange and Foreign Trade Law, in accordance with Resolution Conf. 9.6. However, staff of the Environment Agency (EA), Ministry of Health and Welfare (MHW), Ministry of Foreign Affairs (MOFA) and the Ministry of International Trade and Industry (MITI) can all potentially become involved in inspection and overview of national and international trade in specimens of CITES-listed species.

MITI is responsible for the issuance of CITES documents relating to import, export and re-export.

Illicit trade

Officials told the technical team that wildlife crime, including infractions against the Convention, is uncommon in Japan. The Environment Agency would expect to have only two or three cases

brought to their attention each year and MITI would be notified of approximately 10 cases involving Customs annually.

The team was told, however, that in 1997, Customs staff at ports in Japan made 31 seizures of TM products.. None of these incidents resulted in prosecutions. In each case, the individual concerned surrendered the items to Customs and no further action was taken. Whilst MITI had been told that such seizures had taken place, it had no detailed information regarding the quantities or types of products involved. They were, however, assumed to be small and for personal use, due to the fact that no further action had been taken.

The team learned from an NGO of what appeared to be a highly uncommon infraction of the Convention in Japan, which had been discovered in the recent weeks before the team's arrival. The Police in Tokyo had seized four Orang utans that had allegedly been offered for sale. Enquiries into the case had not been completed. The officials the team had met made no reference to this excellent enforcement action.

Internal trade controls relating to tiger

In the early 1990s, Japan imported considerable quantities of traditional medicines declared as containing tiger parts or derivatives from China. The shipments were all declared as being of pre-Convention origin. No legal imports have taken place since 1993.

As part of the Plan for Domestic Measures for the Protection of Tigers and Rhinoceros, a voluntary registration scheme was established, whereby the Federation of Pharmaceutical Manufacturers Associations of Japan created a register of importers and manufacturers who traded in TM products purporting to contain tiger and rhinoceros parts and derivatives. The register did not include retailers.

The traders agreed to carry out an annual inventory of stocks and report to the Federation. They also agreed to only deal in products that displayed a CITES mark, issued by the Federation. The Federation undertook to verify that stocks notified to them came from a legal origin and that they would only issue CITES marks in numbers that were appropriate to inventories. The use of CITES marks had to be reported to the Federation by traders every six months.

The Federation was established in 1948 and 95 per cent of manufacturers are members of the Associations. The five companies that did import TM products containing tiger, prior to 1994, all agreed to participate in the voluntary scheme. By October 1998, all five companies had reported that their stocks of tiger products had been sold. Consequently, the Federation no longer has any role to play, with regard to tiger parts and derivatives, since its remit does not extend to the retail trade.

The Federation will, however, continue to monitor stocks of rhinoceros horn. The team was told that, in 1998, inventories showed 140 kg to still be available. 106 kg consisted of 45 separate horns, the remainder being slices of horn, pieces of horn and preparations.

The Ministry of Health and Welfare (MHW) has conducted on-site investigations and questionnaire surveys of retail pharmacies and drugstores. Their evidence to the technical team was that remaining stocks of tiger products appear to be very small and that their on-site investigations have shown stocks to carry the CITES marks issued by the Federation. MHW expect stocks of TM tiger products to be completely depleted in the near future. Federation officials estimate that it could take two to three years for all retail stocks to be sold but this is not based on any scientific calculations or survey of customer demand.

MHW officials have responded to surveys conducted by NGOs that found TM products for sale that did not have CITES marks on them. They told the team they had conducted on-site investigations of some of the stores visited by NGOs but invariably found that all products were properly marked. MHW has not, however, conducted any covert investigations.

The technical team considers such investigations and findings, to a degree, of only academic interest since, even if products were not properly marked, no action could be taken under the current legislation in any case.

The team visited pharmacies and drugstores in the Chinatown district of Yokohama, chosen by MHW, and found that only one out of four premises had any TM products purporting to contain tiger. The others had sold all the previously held stocks and said they were unable to obtain more. One pharmacist stated quite clearly, however, that there was still an interest and demand among his customers for such products, particularly tiger bone wine. He had previously charged JPY 10,000 for a 600 ml bottle before his stocks were depleted earlier in 1999.

The one shop that did still have a few bottles of tiger bone wine sold these at JPY 7,000 each for 325 ml. The list of ingredients claimed that there was 100 grams of tiger bone in each bottle.

The technical team subsequently visited a shop selling virility products and two pharmacies in the Ginza area of Tokyo (the city's main shopping district). In each, tiger penises were openly on display and were being sold for JPY 48,000. In one pharmacy, the team was shown a large bottle for the 'home-made' preparation of a tonic that included one seal and one tiger penis, together with slices of deer antler and other ingredients. The instructions for use were that the ingredients should be placed in the bottle, Chinese liquor added, and then left for two months to ferment. Doses of the liquid could then be drunk to aid strength and virility. The bottle and ingredients were priced at JPY 100,000.

The shop stocking virility products, as well as selling tiger penises, also sold virility pills that used a variety of ingredients of CITES-listed species, including tiger. Bear galls, turtles and snake skins were on display. The shop also sold an extensive range of sex-aids.

Team members were able to recognize the tiger penises as genuine and they did not appear old. The owner of one pharmacy told the team that when his stocks ran out, he was able to order more from his wholesaler, who apparently imported them.

The team was already aware of one Japanese company that advertised tiger penises for sale and claimed to obtain these from the Lao People's Democratic Republic.

Traditional medicine

The team was advised by Federation officials that whilst Japan has had a history of TM use for over 300 years, they estimate that it is only for the past 30 years that an interest in tiger bone products has existed.

Pharmacists that the team spoke to said that the majority of their customers were Japanese, with perhaps only 10 per cent being Chinese or from other ethnic groups. One storeowner said that 40 per cent of his TM stock was imported.

The Environment Agency had conducted a survey, as agreed in the Plan for Domestic Measures for the Protection of Tigers and Rhinoceros. A questionnaire was distributed to a random selection of the general public. The conclusions reached following the survey were that education campaigns targeting the younger generation and the development of alternative ingredients to endangered species would be beneficial. Whilst the team would not necessarily dispute or disagree with such findings, it is concerned that the survey findings might have been very different had TM consumers, rather than the general public, been targeted.

Education and awareness

The Japanese authorities have instigated poster, leaflet and media campaigns to alert the general public to the plight of the tiger. Specific campaigns have also targeted airline passengers to raise their awareness of CITES controls. NGOs, to a lesser degree, have also been involved in initiatives.

The team formed the impression, however, that officials engaged in the administration of CITES controls do not have a very extensive knowledge of international wildlife crime and illicit trade. It believes this may adversely affect their ability to oversee controls and develop strategies for such controls.

Aspects for Improvement

During its mission, the technical team met many officials who are clearly dedicated to their work in administering CITES controls and to the aims of the Convention. It is also satisfied that Japan's Plan for Domestic Measures for the Protection of Tigers and Rhinoceros was formulated with considerable care, with a view to fulfilling the provisions of Resolution Conf. 9.13 (Rev.).

The team is aware that Japan does not appear to suffer from wildlife crime to the extent of many other Parties. It also recognizes that society in Japan tends to be orderly and law-abiding, so that voluntary schemes operate effectively in Japan to an extent that might not be experienced in other countries.

Crime and illicit trade is undoubtedly a problem elsewhere in the world, though. For the reasons given above, Japan is, potentially, an easy target for criminals and the team **firmly believes** that the current controls are open to exploitation. Indeed, there appear to be reasonable grounds for suspicion that illegal imports of tiger parts and derivatives may be taking place and that Japanese traders may be exploiting the present system. It is of **considerable concern** to the team that the current controls in Japan would either not allow, or severely restrict the ability of, the enforcement agencies to deal with such specimens once they had been smuggled into the country. The team further believes that the very same control difficulties potentially apply to other CITES-listed species, apart from tiger.

Team members are aware that some Japanese officials have previously voiced the opinion that it would be discriminatory to ban TM products if a demand existed in ethnic communities. The team does not believe that such a demand is restricted to ethnic communities. Even if it were, the community with potentially the greatest demand would, logically, be the Chinese. Since their home country banned internal trade in TM products containing tiger in 1993, the team believes that Japan could consider itself free from any such considerations.

The team accepts that scientific identification techniques for detecting the presence of CITES-listed parts and derivatives in TM products remain incomplete. A tiger penis can, however, be identified morphologically and enforcement officers can also be trained to recognize one. Many CITES Parties also successfully take enforcement action based upon the definition in Resolution Conf. 9.6.

The technical team does not believe that a voluntary or mandatory registration and inventory scheme is sufficient to control internal trade, even if it were to include all retailers. Japan's current legislation is too weak to enable effective enforcement of such a scheme.

The technical team, therefore, **recommends** that Japan's legislation be amended and that an internal ban on trade in parts and derivatives of tiger should be put in place as a matter of priority. It also **recommends** that any amendment to Japan's legislation take into consideration the definition in Resolution Conf. 9.6 as it believes that would assist in its ability to enforce controls relating to all specimens of CITES-listed species.

The team **recommends** that Japan seek out intelligence from other States that indicates that it is the destination for parts and derivatives of tigers (or any other illicit trade in specimens of CITES-listed species). The technical team also **calls upon** all range and consumer States to supply information to Japan that will assist its enforcement agencies in combating illicit trade.

The team **suggests** that Japan consider creating a specialized unit of Customs, Police, or a combination of both, to target illicit trade in specimens of CITES-listed species and that intelligence acquired by such a unit be used in formulating future strategies for Japan's CITES controls and in

planning education and awareness campaigns. The remit of such a unit should also include the raising of awareness of illicit trade among enforcement and relevant administrative agencies.

MALAYSIA

Tiger conservation issues

As tigers are to be found solely within Peninsular Malaysia, the technical team excluded the other territories of the Party from its considerations.

Habitat

Peninsular Malaysia has 750,000 hectares of protected areas, including national parks and wildlife reserves. Forty-five per cent of the forested areas in Peninsular Malaysia lie within national parks and wildlife reserves. Persons, other than existing aboriginals practicing traditional lifestyles (totalling less than 2,000 people in Peninsular Malaysia) are not allowed to reside in protected areas and there is a degree of control too over public access.

That said, the team was advised that Peninsular Malaysia has lost 30 per cent of its forests since the 1960s.

Population studies

WWF Malaysia, in conjunction with government agencies, especially the Department of Wildlife and National Parks, is about to engage in a project that will focus upon a detailed study and survey of one area of tiger habitat. The project will employ the latest techniques that have been shown to be methodically and scientifically effective in determining tiger populations, including camera traps. The main focus, however, will be upon human/tiger conflict. The World Conservation Society is also engaged in population surveys using camera-trapping.

The Department of Wildlife and National Parks (DWNP) is undertaking a detailed study of tiger and prey species populations. This will further strengthen the last population estimates of 500 tigers following surveys conducted by the Department in 1990. The WWF project is one component of the DWNP survey.

Conflict

It has been recognized in Malaysia that because of increasing conversion of tiger habitat to plantation use, particularly palm oil, where livestock is allowed to graze, encounters with tigers are increasingly common on the bordering forest and jungle terrain. The Malaysian Veterinary Services Department, offers a compensation scheme in some states only. It is acknowledged that some fraudulent claims may have been submitted and the WWF project will try to address this by detailed follow-up of reports.

Cattle kills are regarded as not uncommon but agencies also believe that tigers may be blamed when leopards are actually responsible. The WWF project will investigate this subject fully. Malaysian authorities recalled an incident in 1998 where villagers actually tried to pass off a murder as a tiger kill. Fortunately, proper investigation at the scene and elsewhere uncovered the attempted deception.

It is recognized that if the DWNP does not respond to the satisfaction of villagers, when there are conflicts with tigers, then illegal control of tigers may follow conflict incidents. Villagers may respond by the use of firearms or poisoning.

WWF will attempt to quantify the real threat posed by tigers and determine how best to respond.

One interesting observation made during already established studies is that at the scene of some tiger kills of livestock there is evidence of the presence of a mother and cub(s) who made no attempt to eat the livestock killed. Instead, all the signs pointed towards a mother simply teaching her offspring to hunt. This may indicate that tiger prey species remain in adequate numbers and that the plantation terrain is providing access to easy domestic cattle targets for learning opportunities for young tigers.

WWF's initiative will also involve conservation awareness among villagers. This is felt especially important given the experience of 1998 when two humans were killed by tigers; a normally rare experience that fuelled antagonism towards the species. The incident did, however, arouse public attention nationally and brought about conservation awareness for the species. Imaginatively, WWF intend to pose the question to villagers why their forefathers appear to have lived in harmony with tigers but the same is not necessarily true today.

The technical team **commends** the concept of this initiative and believes it offers great potential for tiger conservation.

Legislation

Peninsular Malaysia controls its wildlife through the Protection of Wildlife Act 1972. This law's five Schedules list species that are provided with different levels of protection. Whilst providing protection for a range of species it does not fully implement the Convention. New legislation is being drafted.

Malaysia has designated four ports where CITES specimens may be imported and/or exported.

Panthera tigris is regarded as a totally protected wild animal and is subject to special penalty if anyone unlawfully kills or takes one. Unlawful possession is also an offence. Theoretically, a ten year prison sentence could be imposed upon an offender.

The team noted that Section 51 of the Act would allow the Minister to grant one special permit to each applicant each year to shoot, kill, take, keep, buy, sell, import, export, house, confine or breed any totally protected wild animal. A number of such permits have been issued but on a strictly controlled basis.

Although Malaysia's aboriginal people, numbering approximately 400,000, are specifically entitled by law to hunt and kill certain wild animals for food, this exemption does not extend to endangered species such as the tiger.

Malaysia's law does not take account of items declared as containing protected species and thus prosecution authorities would be required to prove the presence of such an ingredient in, for example, traditional medicines before a successful outcome in court could be expected.

The team noted that the payment of rewards is permitted by the 1972 Act to persons for services rendered in connection with the detection of offences or in connection with any seizures made. It also noted with interest that Section 24 provides legal anonymity for bona fide informers. The team **commends** this practice to other Parties.

Practical Controls

CITES administration

Malaysia acceded to the Convention on 20 October 1977 and it entered into force on 18 January 1978. Eight Management Authorities and one Scientific Authority have been notified to the Secretariat.

The Department of Wildlife and National Parks (DWNP) headquarters in Kuala Lumpur acts as the principal Management Authority and is, in any case, the department responsible for controls relating to mammals in Peninsular Malaysia and the Federal Territories.

Enforcement staff

Although assisted by the Police when appropriate, DWNP's enforcement division is the primary agency authorized under the Protection of Wildlife Act 1972. Enforcement posts consist of Wildlife Rangers, Wildlife Assistants, Deputy Wildlife Officers and Wildlife Officers. Rangers carry out the majority of what might be regarded as routine operational duties in the field whilst Officers are graduate specialists who conduct investigations, including undercover operations, and import and export inspections. Wildlife Rangers are deployed through 12 States and one National Park.

Whilst government salary scales are not as high as might be found in the private sector, employees enjoy a number of fringe benefits such as low interest loans and mortgages. DWNP staff appear also to enjoy public esteem, and vacancies attract many applications. The Department has no incentive or bonus schemes in place but these are being considered. Whilst lower ranks may have second jobs to supplement their income, this is uncommon among senior staff and the team was impressed by the level of dedication and job satisfaction that was encountered.

Although Malaysia's Customs officers are seen by DWNP as important allies in combating illicit trade, with some CITES awareness training having been given, they are expected to advise DWNP enforcement staff when CITES specimen shipments are encountered.

In a similar manner, DWNP appears to enjoy multi-agency co-operation with other government agencies that can impact upon wildlife conservation and enforcement issues, with regular inter-departmental meetings.

Gun ownership is strictly controlled by law and illegal possession is not regarded as being extensive. Enforcement staff have the right to carry weapons on duty.

Illicit trade

The team was advised that DWNP consider that poaching is primarily targeted towards wild boar and deer, essentially for meat. This is thought to be confirmed by the fact that most illegal methods detected or encountered by Rangers are snares of a nature that would be suited to those species. Tiger poaching is thought to be low, with that of elephant being the most common relating to endangered species. Ivory obtained through poaching is thought to be smuggled out of the country to the north.

Tiger poaching and illicit trade is also thought, by some people, to be linked to traders from Thailand and Lao People's Democratic Republic, although cross-border smuggling of sandalwood is regarded as probably more common.

The team spoke to a variety of persons and organizations that, potentially, were in a position to be aware of tiger poaching and illicit trade. Whilst no in-depth studies have been conducted, it seems that criminal activities are concentrated in rural areas but, even there, are apparently at a level below that experienced in other range States. The team presumes this results from the fact that Malaysia is considerably more 'developed' than many other range States.

The team learned of an incident in 1998 where a wild tiger was crossing a road in a rural area and was killed by a passing bus. By the time DWNP personnel arrived, the carcass had been stripped of some parts but the majority of the body, including the skin, remained. Such an incident is not consistent with high demand for tiger parts. The team would have expected that, in many other States, the entire carcass would have quickly been removed.

The team heard that DWNP was regarded as having insufficient resources to patrol effectively in Malaysia's border regions. Concern was also expressed that DWNP was regarded as of less importance than forestry interests.

It seemed generally accepted that 'in the field' a lack of communication existed between Forest Rangers and Wildlife Rangers. The team was told that it was unlikely that Forest Rangers, upon discovering a poaching or illicit trade incident, would advise Wildlife Rangers, and vice versa.

Traditional medicine

The team met with a senior executive from a TM company with a large office and premises in Kuala Lumpur that also has premises elsewhere in Asia. That individual was of the opinion that the TM community in Malaysia had a reasonably good understanding of CITES controls relating to highly endangered species, i.e. tiger and rhinoceros. It was apparent, however, that the way in which the Convention impacts upon trade in plants involved in TM was not fully appreciated, either by that person or others in his business community.

The team saw 'tiger bone plasters' openly for sale in pharmacies in the 'Chinatown' of Kuala Lumpur. Upon questioning, however, each shopkeeper indicated that the products did not contain any actual tiger parts or derivatives but that the labelling of 'tiger' simply reflected a traditional style of preparation, in much the same way as 'tiger balm' is known not to use tiger parts. The TM representative confirmed this and expressed some surprise that such products if encountered by enforcement agencies in the west would be confiscated.

The same person thought that demand for TM preparations incorporating tiger parts was low in Malaysia. The team received reports that this probably accurately reflected the situation in Kuala Lumpur but was told that the same was not necessarily true of some practitioners, pharmacies and stalls in rural areas.

The team did, however, empathize with the executive's opinion that the outright dismissal of TM's potential beneficial properties by some persons and groups in the 'developed' world simply alienated the Asian communities.

Education and Awareness

Enforcement personnel

The Malaysian government sponsors staff to travel abroad to attend universities to obtain further education, such as Master's degrees, and the team learned of DWNP staff that had benefited from this. There was a high level of knowledge of CITES matters among staff that the team met.

Traditional medicine practitioners and consumers

The DWNP has had contact with TM practitioners and suppliers in Malaysia but it appears that this has been relatively limited.

The Malaysian authorities do not appear to have engaged in specific education and/or awareness campaigns among the general public, relating to either poaching or consumption of traditional medicines that might contain endangered species ingredients.

The general public

That said, DWNP works closely with the Malaysian Nature Society (MNS), established in 1940. The MNS impressed the team as a national NGO that is committed to environmental and conservation initiatives. With a membership of approximately 5,000, it employs 35 full-time staff. The Society is engaged in a wide range of educational projects, targeting the general public, further education establishments and schools. It is also involved in educating schoolteachers so that they can then raise awareness among their pupils.

So close is its relationship with government that it has been allowed to assume operational and practical control over land designated as nature parks and is engaged in a number of tree

planting programmes. MNS benefits from sponsorship from Malaysian companies and international NGOs. Its headquarters are situated within a government owned building.

Although no formal requirement is in place, MNS is normally consulted by the government in relation to commercial developments in areas of conservation concern and the Malaysian government appears to take the concept of environmental impact assessments seriously.

MNS has a web site at www.mns.org.my

The MNS has been the lead agency in promoting the Species Survival Network's 'Asian Conservation Awareness Programme' (ACAP), which supplied material to MNS that can be used to increase awareness and discourage consumption of endangered species parts and derivatives. ACAP's campaign, entitled 'When the Buying Stops, the Killing Can Too' is available for adaptation. The MNS has made use of the basic campaign material since June 1998 but is keen to expand upon the theme in a manner applicable to Malaysia. The team was highly impressed by the way in which the Society has planned to employ and develop the basic precepts of the campaign. It saw examples of imaginative and innovative material that have been designed for use by MNS but for which the Society requires financial support before being able actually to put these into production and distribution. The Society intends to launch phase two of its ACAP awareness campaign in June 1999.

The Society, in common with the general ACAP approach, has made use of the film star, Jackie Chan, as a promoter for the campaign.

The team also commends MNS for its efforts to raise awareness of other conservation concerns specific to its nation, specifically turtle, bear, rhinoceros and elephant, apart from tiger. MNS and DWNP are, however, giving particular emphasis to marine turtles and the tiger.

The team was highly impressed with the commitment and dedication displayed by MNS personnel. It believes that such NGOs provide an extremely valuable opportunity for the general public to demonstrate, both vocally and practically, conservation concerns. The close relationship between MNS and Malaysian governmental departments is to be commended. The team believes that MNS sets an example that is very worthy of replication in other range States.

Aspects for Improvement

The team **encourages** Malaysia to continue its efforts to draft new legislation and recommends that the CITES Secretariat should assist by reviewing the draft, once available. It **recommends** that any new legislation should take account of Resolution Conf. 9.6.

The team believes there are sufficient grounds for suspicion that illicit trade in endangered species remains a problem in rural areas. It **recommends** that DWNP personnel of Officer status (i.e. investigators) should be deployed, albeit on short- or mid-term basis, into such areas with a view to investigating the level and nature of such trade. Thereafter, enforcement and education projects should target any trades located.

The team **commends** the joint DWNP/WWF project relating to tigers and believes that this may well produce results that will be of benefit to many other Parties.

MYANMAR

Tiger conservation issues

Forest Department officials place the tiger population of the country between 300 – 500. This is based on an estimate of the number of tigers likely to be present within suitable terrain and on the questioning of local residents and officials. From comments received from persons who know the

country, together with its own observations, the team believes that forest degradation and habitat loss through logging and increasing conversion to agricultural use must be having a serious impact.

The team heard of one camera survey that had been conducted in what should have been suitable tiger habitat and that had failed to record a single tiger during the period of one year, despite photographing leopards on many occasions. It should be acknowledged, though, that the survey did not have tiger as its target species.

Importantly, through a joint memorandum of understanding, the Forest Department and the Wildlife Conservation Society (WCS) will commence a camera trap survey in June 1999 within one of Myanmar's national parks. A team of five Forest Department staff and one WCS staff member will use 50 cameras to survey an area that is considered suitable for tigers. A three-year budget has been provided by the WCS, Exxon and the Save the Tiger Fund.

Fortunately, Myanmar's northern regions, which are regarded as suitable tiger habitat, are generally regarded as so remote and difficult to access that they may remain safe from illegal activities. It remains to be seen, however, whether tigers are still present and, if so, whether they are in viable numbers.

Legislation

Myanmar's Protection of Wildlife and Wild Plants and Conservation of Nature Areas Law of 1994 establishes protection for a range of species and provides for the designation of areas of land for conservation. It gives to the Minister and Director General of Forestry power to prescribe the activities that may be allowed and to grant licences for hunting and commercial activities.

The law does not enable Myanmar to implement the Convention.

The law, under Notification No. 583/94, designates 31 mammal species as Completely Protected Wild Animals. *Panthera tigris tigris* and *Panthera tigris corbetti* are both listed in that Notification. Consequently, whoever kills, hunts or wounds without permission, possesses, sells, transports or transfers such wildlife or any part thereof without permission, or exports without the recommendation of the Director General either of those subspecies, is liable to a maximum of seven years imprisonment and/or a fine of Kyats 50,000.

The minor exemptions that could apply to these provisions would not apply to commercial trade or poaching activities.

The team was advised that it was only with the issuance of the 1994 Notification that tigers received completely protected status.

Myanmar's law does not take account of Resolution Conf. 9.6.

Practical Controls

CITES administration

Myanmar acceded to the Convention on 13 June 1997 and it entered into force there on 11 September 1997. One Management Authority and one Scientific Authority have been notified to the Secretariat. Both are within the Forest Department. Knowledge of the Convention appears limited.

Myanmar has a ban on commercial exports of fauna and flora at present. It is, however, considering the commencement of export of plant species for the medicinal trade.

Enforcement staff

Although the Forest Department was established in 1896, the Nature and Wildlife Conservation Division is a much more recent initiative, having been created in 1981. The Division accounts for only approximately 10 per cent of the Forest Department's 10,000 staff. Of the total territory of Myanmar, 2.2 per cent has been designated as protected areas for wildlife and conservation purposes. This includes 28 wildlife sanctuaries and three national parks. A target has been set that this should be extended to five per cent. Buffer zones will be created around protected areas to provide for the needs of local peoples. Seventeen per cent of the country is reserved forest area where sustainable logging is practised. It is intended that this should be extended to 30 per cent. The country continues to adopt a traditional approach to logging within reserved forest areas and uses approximately 4,500 elephants on such work throughout the nation.

The Nature and Wildlife Conservation Division has relatively few staff dedicated to enforcement, although the team was advised that some anti-poaching units have been created in national parks.

It appears that only a limited amount of active patrolling is undertaken by either Nature and Wildlife Conservation Division personnel or the Forest Department's Forest Guards. Instead, enforcement personnel will respond to specific information. Indeed, one of the few enforcement actions recounted to the team related to the Police, who were advised of a woman about to board a bus from Mandalay to Yangon with a leopard skin, and it was that agency that responded and dealt with the matter. That apart, routine involvement of the Police, Military or Customs services in wildlife law enforcement is apparently uncommon.

Importantly, the Forest Guards, to whom such duties fall, do not patrol in border areas because of the presence of insurgents. The technical team was advised that, prior to its visit, the government had decided not to allow it to visit border areas because of the danger from insurgents. Myanmar has no bilateral agreements on enforcement matters with its neighbours.

The team observed, however, that staff from the main enforcement agencies jointly man internal checkpoints on main roads where travellers are stopped and questioned. These checkpoints provide an opportunity to inspect vehicles and their loads.

The personnel of Myanmar's enforcement agencies suffer from the difficulties seen by the team elsewhere; low salaries, limited resources and equipment, together with, in tiger habitat, inhospitable terrain that can be difficult to access.

That said, the team met with individuals in the Nature and Wildlife Conservation Division whose conservation awareness had been raised and who were dedicated to their work. The team believes that a number of factors, including the traditional enforcement and administrative approach of the Forest Department, primarily established in colonial times, does not lend itself to tackling illicit wildlife trade.

Illicit trade

The team visited Forest Department offices within the Mandalay Division and spoke with supervisory staff there. Apart from the incident dealt with by the Police described above, the staff were unable to recall any other enforcement action in recent times. Further, the team was told by a number of officials in Yangon and Mandalay that poaching and/or illicit wildlife trade was regarded as rare.

This was in contrast to its discussions with other individuals who indicated that poaching was common in some areas, especially amongst the traditional hunters of the Kachin and Liso ethnic groups. Whilst such groups use home-made firearms, general access to weapons is very limited. The team heard that most poaching is done with the use of snares. The team also received reports of wildlife products on sale in many rural markets. The team was already aware of similar reports, often accompanied by photographic evidence, previously published by the media outside Myanmar. It was told that skins and bones were thought to be smuggled into Thailand

and to China. Given the dangerous nature of some border areas, however, it is difficult to assess the true nature of the problem or begin to address it.

The team itself encountered two small stalls on the approach path to Mandalay's main pagoda where a selection of bones, skins from small felids and reptiles, antlers, skulls and horns were on sale. Each stall had one skull that the stallholders claimed to be tiger and the team thought this likely to be correct. The stallholders were offering to sell small parts of the skulls to be crushed into powder for medicinal purposes. One offered to sell a whole skull for USD 15. Neither skull was complete; each had had the main jaw and canine teeth removed. The team was unable to ascertain where these persons had obtained the skulls.

The team had access to the results of a survey describing trade and smuggling of wildlife within Myanmar, particularly at checkpoints. The survey showed that tiger and leopard skins and parts were among the specimens traded. The traffic was particularly visible at the border with Thailand and it appeared that there was a lack of co-ordination between the enforcement agencies of both countries.

Education and Awareness

As indicated above, awareness of wildlife conservation appears limited and probably restricted to senior Forest Department staff. The team formed the view that general awareness amongst the public is also low. It learned that environmental issues are only just beginning to appear in the curricula of higher education establishments; there being none at school levels.

It was observed, though, that television ownership appears widespread and that Myanmar's national broadcasting companies carry health education and drug-awareness features. This medium must provide scope for raising conservation awareness also.

The team visited Mandalay Zoo and was impressed with its setting within the city and its facilities. Established three years previously with animals from Yangon Zoo, information for visitors is relatively detailed but does not include any facts relating to why some species are endangered or the nature of the threats to their continuing existence. The facility attracts a considerable number of Myanmar citizens as visitors and the team believes it provides an ideal venue for further education and raising conservation awareness among the general public. The zoo's director, a Forest Department Park Warden, is keen to develop these aspects and wishes to involve the zoo in local schools, both by having pupils visit the zoo but also by his staff becoming involved in public awareness programmes in schools.

Like many of its neighbouring countries, Myanmar's rural population is poor and has little reason to view wildlife as anything other than a source of food or potentially an additional source of income.

Myanmar has promoted itself as a tourist destination and the team spoke with tourists who had been impressed with the country's friendly people and beautiful scenery. The team **believes** that the already established tourism could be expanded into the realms of eco-tourism and could provide an increasing incentive for local communities to value and protect their fauna and flora. In contrast, the open display of wildlife products in areas visited by tourists is surely likely to be counter-productive.

Aspects for Improvement

CITES awareness training is badly needed for Management and Scientific Authority staff and enforcement agency personnel, including Police and Customs. This is **required** as a matter of priority.

In the short term, the team **recommends** that supplementary practical advice be provided to operational personnel as a priority. For example, it suggests that the type of manual that has been prepared by TRAFFIC for use elsewhere in Asia be translated into Burmese and widely distributed among, in particular, Forest Department enforcement personnel.

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens. Such units could supplement, or include, the anti-poaching patrols that apparently exist already. An early enforcement priority should be to target domestic markets. Combating cross-border crime and trade will depend upon the stability of such areas and the ability of enforcement staff to enter them safely. The establishment of bilateral enforcement agreements with neighbouring countries should assist progress.

The team **recommends** that efforts to accurately and methodically survey tiger populations and their locations should be extended and maintained in a manner that will enable numbers to be monitored. The team believes that some tiger populations may be at significant risk from illicit activities and that the loss of habitat must lead to genetic viability in isolated populations of tigers being questionable in some areas. The joint Forest Department/WCS initiative should provide vital early indications of the seriousness of the situation.

The team formed the impression that the Nature and Wildlife Conservation Division holds relatively low status compared to other Departments and Ministries that control commercial activities. It **believes** that a strong lead from government can correct this situation and that conservation should be given a higher priority. Myanmar's natural resources are considerable and can clearly provide benefit to the country and its citizens in a variety of ways if managed in a sustainable fashion. This includes its fauna and flora once a better understanding of trade pursuant to the provisions of the Convention has been achieved.

General awareness of conservation issues **requires** to be raised substantially and in a manner that will be meaningful to rural populations.

NEPAL

Tiger Conservation Issues

Habitat

Nepal has established Tiger Conservation Units within its National Parks and protected areas and prohibits unauthorized persons from entering. To compensate local populations, a scheme has been initiated to provide people living in buffer zones in the surrounding area with up to 50 per cent of the revenue obtained by the government from park entrance fees and franchise fees paid by licensed tourist facility providers. Eco-tourism is a major factor and source of income. Over 50 hotels, for instance, now exist in the immediate area of Royal Chitwan National Park. Buffer Zone Councils allow representatives of the population to determine how such income should be disbursed or spent.

The number of people within buffer zones is substantial. For example, 250,000 live around Royal Chitwan National Park and 100,000 around Bardia.

Although foreign companies and investors have traditionally controlled tourist facilities, the growing involvement of Nepalese and the potential of private reserves was apparent.

A growing threat to at least two of the parks is the major highways that run through the middle of each. Not only is disturbance caused to wildlife but the number of road kills, including tigers, is increasing. The highways used to be closed during the hours of darkness but are now open 24 hours each day.

NGOs are also concerned that the potential for mineral and oil exploration could place protected areas at risk.

The national parks and protected areas bordering India contain populations that, understandably, do not recognize national boundaries and liaison takes place on a regular basis between park authorities in each country. Cognizance has been taken by Nepal and India to ensure adjoining habitats in each country enjoy protected status.

Illegal logging was said to be a problem in the northwest of the country.

Population studies

The government, assisted by national and foreign NGOs, has engaged in regular monitoring of tiger populations using pugmark studies and, more recently, camera trapping. The surveys indicate what seems to be a relatively stable countrywide adult population of 100 tigers.

There is no captive-breeding of tigers in Nepal.

Conflict

Conflict between tigers and humans or livestock does not seem to be a significant problem in Nepal. This may be accounted for by the presence of buffer zones, the relatively low numbers of tigers and the apparently healthy number of prey species.

One man-eating tiger had to be killed in 1998 in the Royal Chitwan National Park area but it is believed that it had, in fact, crossed the border and was originally from Indian populations.

Legislation

Nepal's domestic law is not able to implement the provisions of the Convention. The team was advised that new legislation is being drafted.

National law protecting species and controlling hunting is, however, quite strong and carries penalties including fines up to NPR 200,000 and 15 years imprisonment.

The law gives very considerable authority to the Chief Wardens of National Parks and protected areas. So much so, in fact, that Chief Wardens are judge, jury and responsible for overall supervision of enforcement. Offenders apprehended by staff of the Department of National Parks and Wildlife Conservation (DNPWC) are reported to the Chief Warden who will review the case and decide upon a relevant penalty, including imprisonment where that is deemed appropriate.

Practical Controls

CITES administration

Nepal acceded to the Convention on 18 June 1975 and it entered into force there on 16 September 1975. It has notified two Management Authorities and two Scientific Authorities to the Secretariat.

Enforcement staff

DNPWC staff enforce wildlife laws within protected areas, while Forest Department staff have that role elsewhere. Customs officers deal with border controls and Police provide investigation assistance. Indeed, a Police presence is required if DNPWC or Forest guards are making arrests other than routine detentions outside their usual patrol areas.

Since 1994, dedicated anti-poaching patrols, primarily aimed at providing greater protection for tiger and rhinoceros, have been created by DNPWC. WWF has assisted in supporting 15 of these units with field gear, radios and some night vision equipment. The Units, consisting of a Senior Game Scout and four Game Scouts do not, however, carry firearms and must rely on the traditional Gurkha weapon, the Kukhri, to defend themselves. Poachers have been known, however, to have been shot by Army personnel during clashes.

In 1989, two scouts were killed when the 13 poachers they had arrested set upon them.

The Nepalese army is present in large numbers in protected areas and main entrances, exits, and regular checkpoints throughout the parks. The team found that they were stopped, and had their passes inspected, more often in Nepal than in any other range State. This was despite the fact that they were inevitably accompanied by DNPWC personnel and/or Tiger Tops Lodge staff.

The Army does not, however, have specific wildlife protection patrol duties and the team was concerned that such a large presence might have negative effects. Disturbance to animals, and the risk that soldiers may be tempted to poach animals to supplement official rations, has been noted in other countries. Whilst the team received no reports of this in Nepal, it remains wary this might occur.

WWF operates an Award Scheme, in conjunction with DNPWC, to recognize good work by field staff. Some 25 persons have been recognized so far.

DNPWC and the Police both operate schemes where cash rewards can be given to informants whose information leads to arrests and/or seizures of illicit goods.

Corruption, or collusion between the authorities and poachers or traders, was not reported as a major problem in Nepal. The team was, however, concerned when it learned of the following. Nepal's national forensic science facility has a practice of indelibly, but discreetly, marking items that are submitted for examination. On more than one occasion, staff have noticed that horns that were submitted for confirmation that they came from rhinoceros have been submitted yet again subsequently. The suspicion being, of course, that a seized specimen has somehow found its way back into illicit markets. The team **recommends** that this subject be investigated and action taken to eliminate opportunities for such abuse of evidence.

Illicit trade

Officials and field personnel told the team that the majority of poachers were Nepalese. Trapping, by use of snares, is the most common method of taking animals, including tiger and rhinoceros. The team was told, though, that some organized poaching occurred that included the use of 4x4 vehicles and high-powered rifles.

The team saw for itself the results of a poaching attempt when they encountered a female rhinoceros and calf one morning. The mother was seen to have a snare loop embedded in the flesh of one of her hind legs. Later that day, team members were able to witness the tranquillising of the animal, the removal of the snare and treatment of the wound. The operation was an excellent example of the co-operation between government staff, a commercial operation and NGO assistance. Whilst game staff from Tiger Tops Lodge, and their elephants, corralled the rhinoceros, DNPWC staff (who authorised and supervised the work) assisted as a veterinary surgeon employed his skills. The surgeon is in Nepal, on behalf of the Zoological Society of London, to help train field staff.

The joint operation illustrated what can be achieved by the sharing of skills, resources and expertise but also clearly demonstrated that illegal activity can still take place in an area actively patrolled by anti-poaching units and where a substantial Army contingent is based. That part of the park is also traversed each day by tourists, accompanied by expert guides, on foot, in boats, in Land Rovers and on the back of elephants.

Although the prognosis for the rhinoceros was said to be good, the incident also showed how an apparently unsuccessful poaching attempt might still have resulted in the death of a mother and calf. The team was searching for tigers at the time it came across the injured animal and reported the sighting to the authorities.

Officials and NGOs see parts of Nepal as especially at risk from poaching. For example, the killing and taking of musk deer in the national park near Mount Everest has been noted to be easier because populations of the animals are higher there. This is due to the fact that the local Sherpa populations are strongly Buddhist and, so, do not hunt animals.

The team repeatedly heard that Nepal's major problems result from illicit trade transiting across the country. Large tracts of its land are difficult to patrol and many border crossings are unmanned by the authorities. Residents in some border areas are entitled to cross freely, within a number of kilometres, on either side. Combined with Nepal's cultural history as a trading nation, its geographical position means the country is a significant transit point between, for example, India and China. Himalayan mountain tracks and passes often serve as routes for legal and illegal traffic.

The team was told that smuggling of tiger parts and musk pods, from Nepal and India, to China is ongoing. The wool of the Tibetan antelope is smuggled in the opposite direction.

WWF staff in Nepal advised the team that they intend, in the near future, to try to investigate more closely domestic markets for the wildlife trade in Nepal. They are especially keen to discover whether apocryphal evidence relating to the bartering of specimens of one species for another is actually true. The team was told of the location of what is regarded as the major trading venue but is not recording this, to avoid compromising future investigations or enforcement actions.

The team heard of such bartering from various sources but was unable to quantify the accuracy of the information.

Nepal's involvement in the trade in shahtoosh is described elsewhere in the team's report.

Traditional medicine and other use of wildlife

Whilst the use of traditional medicinal products remains commonplace in Nepal, most persons the team spoke with were of the opinion that the market abroad, for such as tiger bones, was more attractive to dealers. China was regarded as the country of destination for smugglers. The use of tiger bone and rhinoceros horn domestically was not discounted, however.

The team visited two repositories for products seized by enforcement staff and saw substantial quantities of skins, hides and bones. These included rhinoceros, bear, tiger, leopard and other cat species.

During one such visit the team were shown what were claimed to be the 'floating bones' taken from the collar bone area of a tiger skeleton. It was told that such bones were highly prized by Chinese gamblers as good luck charms and that buyers would be willing to pay up to USD 25,000 for one. Later research by the team confirmed that such skeletal parts have traditionally been prized but it was unable, in subsequent visits to other range States, to locate anyone else who knew of such substantial financial interest. Further, the team believes that the bones it saw

in Nepal would not actually have come from a tiger but some other, smaller, cat species, perhaps a leopard.

The fact remains, however, that a belief in such a lucrative market, albeit misplaced, may be a motivating factor in tiger poaching in Nepal.

Perhaps more than in any other range State, the team learned of the many and varied cultural uses of wildlife products that are part of Nepal's traditions. The tiger's link to Lord Shiva in religious beliefs had led to its skin and other parts being prized as charms and symbols of power. Musk pods have a place in traditional wedding ceremonies. Rhinoceros skin is traditionally used as a form of offering in funeral ceremonies and is believed to assist the smooth crossing of the deceased to the spirit world and/or reincarnation.

Rhinoceros blood and a rhinoceros carcass also have a traditional part in royal coronations and other ceremonies but the team was told that such use no longer takes place.

The team learned that these forms of traditional use of wildlife products are not regarded as being so important that they would motivate poaching but may indicate potential domestic markets that remain, even if in a somewhat limited fashion.

Education and Awareness

The King Mahendra Trust for Conservation, the major national NGO in Nepal, has a history of involvement in these fields. It also drafted legislation to allow part of park revenues to go to the benefit of local communities.

Land restoration programmes on the borders of national parks, to enable further eco-tourism, have involved the local communities.

WWF has a number of school-based programmes, raising wildlife conservation awareness. These have included the concept of pupils writing letters to their counterparts abroad, asking them not to buy medicines that have endangered species ingredients. WWF has helped distribute these letters to schools in Japan, Hong Kong and Malaysia.

The impact of tourism, and the opportunities for local populations to benefit from it, were perhaps more obvious in Nepal than in any other range State. The government is clearly alert to the potential and the team **commends** the policy of allowing communities to directly benefit from park revenues. It noted that all commercial operators must be licensed by the government but **believes** that the potential to expand the involvement of Nepalese service providers, as opposed to the present situation of many foreign companies, remains to be fully exploited.

The team was provided with details of workshops and seminars that have taken place between the authorities of Nepal and China to establish joint actions relating to such issues as wildlife crime, tourism management and forest fires. These have been conducted with the assistance of the Mountain Institute. The team was also impressed with the degree of liaison and co-operation between Nepal and its counterparts in protected areas along its border with India. Nepal was one of the few Parties where routine communication appeared to take place between operational managers of protected areas on opposite sides of national boundaries. The team **commends** such approaches to other Parties.

Aspects for Improvement

Overall, the team was impressed by the level of active co-operation between the authorities and NGOs in Nepal and the general awareness of the importance of wildlife conservation. It **commends** Nepal for the development of a Tiger Action Plan that may be of interest to other range States.

The team **encourages** Nepal to continue its efforts to draft new legislation and recommends that the CITES Secretariat should assist by reviewing the draft, once available. It **recommends** that any new legislation should take account of Resolution Conf. 9.6.

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens.

The team believes there are sufficient grounds for suspicion that illicit trade in endangered species remains a problem in some areas. It **recommends** that investigating the level and nature of such trade should be a priority for the specialized units that it recommends are created. Thereafter, enforcement and education projects should target any trade identified.

The team **believes** that the deployment of specialist units is not only essential to combating domestic issues but can play a vital role in tackling the illicit international trade crossing Nepal's borders.

NOTE: At the time of the technical team's visit, a project report entitled 'CITES Compliance in Nepal' had just been published. The report recorded the findings of a project, funded by the United Kingdom Government, and conducted over a period of many months. The team **commends** the concept of the project as being worthy of consideration by other Parties that might wish to have an independent overview of their implementation of the Convention and **commends** the observations and recommendations of the report to the Government of Nepal.

THE NETHERLANDS

Tiger conservation issues

There are no wild tiger populations in the Netherlands. The country has a long history of providing financial assistance to conservation projects in developing countries and those with economies in transition.

Legislation

The Netherlands implements the provisions of CITES via European Union law (Council Regulation No. 338/97 and Commission Regulation No. 939/97). Domestic control of tiger products was already in place within the Netherlands, however, through the Dutch Endangered Species Act of 1995. Consequently, sale, purchase and possession are unlawful without a permit. The Act carries monetary penalties of fines up to NLG 1,000,000 and offenders can be imprisoned for up to six years.

Like other EU countries, the law controls products labelled as containing CITES-listed species.

CITES-related legislation aside, other domestic law only becomes applicable where a product is purported to have a medicinal effect. Consequently, the majority of TM products are viewed simply as health supplements. TM Practitioners are not regulated unless they actually describe themselves as doctors

Practical Controls

CITES administration

The Netherlands ratified the Convention on 19 April 1984 and it entered into force there on 18 July 1984. Several Management and Scientific Authorities have been notified to the Secretariat.

Enforcement staff

Enforcement of wildlife legislation is the responsibility of the General Inspection Service within the Ministry of Agriculture, Nature Management and Fisheries (also the CITES Management Authority), the Customs service and the Police.

There appears to be a high level of awareness of CITES issues among the enforcement agencies, which is reinforced by the existence of liaison and collaboration between the agencies through a CITES project group. The group co-ordinates enforcement and training.

Illicit trade

The Netherlands is a major transit point for wildlife shipments, particularly products and plants through the port of Rotterdam. Live CITES-listed animals may only be imported through Amsterdam and Maastricht airports. Medicines are mostly imported through Amsterdam airport. Shipments in the bonded warehouses of the port of Rotterdam can be inspected by the General Inspection Service and/or Customs but can also be accessed by shippers and owners. The team noted that there appears to be a loophole in the controls within these warehouses whereby owners of shipments can enter the premises and actually alter the labels of packaging prior to making formal declarations at import. Customs do not regard such shipments as having formally entered the Netherlands and it seems that there is nothing in Dutch legislation to prevent this. The team was advised that many of these shipments are not, in fact, destined for final use in the Netherlands and that whilst, for example, an importer may be Dutch, the goods may be intended for premises in France.

The team is concerned that unscrupulous traders are abusing the right of access to bonded warehouses. Such action would also be contrary to the provisions of Resolution Conf. 9.7, paragraph h).

The enforcement agencies were unaware of any domestic interest in tiger skins but knew of animal skull collectors in the Netherlands who appeared interested obtaining those of tigers and bears.

Traditional medicine

Customs officers and the General Inspection Service are aware of consignees entering the warehouses and obliterating references on TM products to endangered species ingredients. In practice, that is often achieved by persons using previously printed 'stickers' to replace or partly cover the original packaging. That having been done, the goods are then declared for formal import inspection. Since no labelling relating to CITES-listed specimens remains, the items are then free to enter the country if enforcement staff have no reason to suspect the presence of specimens of CITES-listed species.

In a similar vein, the authorities are aware of correspondence between TM suppliers and manufacturers in China encouraging the re-labelling or re-naming of ingredients.

It is understood that some training (in traditional medicine) of TM practitioners takes place in the Netherlands but little research has been conducted into the demand for TM products by the authorities.

The authorities note an increasing interest in alternative medicine among the Dutch public, with 60-100 TM and herbal medicine shops and pharmacies in the country. Although both TRAFFIC and the Environmental Investigation Agency have reported illicit TM products openly on sale in such premises, the authorities have not encountered these during their visits. Dutch law strictly controls covert operations and there is little scope for the authorities to engage in that form of enforcement work unless the crimes are of a serious nature. The law also requires that any persons engaged in such work be enforcement officials. Understandably, that restricts the opportunity to use persons of an Asian background, in test-purchases for example, unless they were actually Police, Customs or General Inspection Service personnel.

The relatively regular seizures of illicit imports of TM products by the authorities certainly suggest that a demand exists in the Netherlands.

The Police advised the team that they have attempted in the past to make contact, via Interpol, with the authorities in China following the seizure of products apparently manufactured there but with little response.

Interestingly, the authorities also report seizures of TM products that have Indonesian and Thai languages, as well as Chinese, on the packaging, although these appear to have been manufactured in Hong Kong.

Like their counterparts in the United Kingdom, the authorities have noted an increasing amount of TM products labelled as containing leopard bone.

Experience of prosecutions relating to TM products in the Netherlands has been relatively limited, apart from one significant case a few years ago following an investigation that focused upon a major supplier who was also shipping products elsewhere in Europe.

The General Inspection Service has noted that patent numbers on TM product packaging sometimes refer to ingredients and may be used to identify the species concerned. The team had not heard of this before and commends the use of this information to other enforcement agencies.

Special assistance

The technical team visited the government-funded Forensic Science Laboratory and discussed species identification with two officials there. Whilst the laboratory appears both equipped and willing to assist in wildlife crime issues, it has no experience of such work. The services of the U.S. Fish and Wildlife Service's laboratory have been used in the past and there appears to be a good liaison between the two facilities.

The Customs service's laboratory has some experience of dealing with wildlife matters, caviar for instance, but does not have the capability to conduct DNA profiling.

Education and Awareness

The authorities have engaged in public awareness campaigns on general CITES issues but there has been no targeting of the traditional medicine trade or liaison with ethnic communities.

The Police have, however, produced four volumes of informative material on traditional medicine that have been distributed among the enforcement agencies. The team **commends** this initiative.

Aspects for Improvement

The team was advised that the authorities in the Netherlands hope to conduct more detailed research into illicit TM trade. Continuing seizures indicate that to be warranted.

Although the enforcement agencies appear to have a good level of awareness of illicit TM trade and are ready to combat it, the Netherlands seems to be well behind in the field of public education and awareness. The team **believes** that a much better knowledge of the demand and increased contact with practitioners and ethnic communities will be needed before effective public awareness programmes can be developed. The domestic interest in alternative medicines among those of non-Asian backgrounds will require to be taken into account.

The Netherlands does have the advantage, however, of being able to draw upon the experience of other CITES Parties.

RUSSIAN FEDERATION

Tiger conservation issues

In 1994, the Russian Federation, assisted by NGOs' financial and practical support launched a Strategy for Conservation of the Amur Tiger in Russia. Now commonly referred to as Operation Amba (after the local term for tiger), the strategy uses a variety of approaches that combine increased protection for the species, its prey and its habitat, the development of a network of tiger reserves, prevention of conflict between tigers and humans, population monitoring, with increased research into biological peculiarities of the Amur tiger.

It appears generally accepted that several of the elements in Operation Amba have proved successful and tiger populations are stabilizing and perhaps increasing.

Habitat

The Amur tiger in the Russian Federation is thought to be present only in the Far East regions of Primorsk and Khabarovsk. Huge tracts of these regions, or krajs, are covered in dense forest that extends to over 13 million hectares in Primorski krai alone. Commercial operations involving natural resources are regulated by the State and Regional authorities but illicit activities, including illegal logging and poaching, create problems for enforcement staff. For example, there were over 500 cases of illegal logging in Primorski krai in 1998. One 2.5 metre long ash tree can be sold for USD 600-1,000. Federal Forest Service Inspectors have been fired at and murdered by illegal loggers.

Population studies

An essential element of Operation Amba has been a determined effort to accurately record numbers of tigers in the two regions. Combinations of methods, including use of transects, recording of tracks in the snow, examination of pugmarks and radio collaring have all been employed. One research project has also used the novel approach of training dogs to differentiate between the faeces of individual tigers.

The results of the most recent census indicate 400-450 tigers in the two regions.

Conflict

During the period 1994-1999, over 50 cases of conflict between tigers and humans have been officially recorded. In 1998, a tiger killed two legal hunters in Primorski krai and two tigers threatened villagers and injured cows and dogs. The enforcement authorities killed these tigers. The authorities killed 2 tigers in 1999 following injuries to people.

The peak period for conflict is in January, February and March when legal hunting activities and natural winter mortality have reduced tiger prey species levels.

The team was told that responses to conflict cases are sometimes hampered by the fact that authorization to kill a tiger in such a situation must first be obtained from the headquarters of the State Committee on Environmental Protection in Moscow. Given the communication difficulties that may be encountered in the Russian Federation and the requirement to be able to react appropriately as a scenario develops, the team **agrees** with the suggestion of local officials that operational decision-making powers in conflict cases should be delegated to regional level.

The State has no compensation scheme for conflict cases, although local arrangements have been made in the areas of some reserves.

In some areas of Primorski krai, the authorities have had some success in treating the carcasses of livestock with foul-tasting repellents that deter the tiger when it returns to feed on its kill.

Firecrackers and other loud noise sources have been used to scare tigers that have been reported to be roaming close to villages.

Legislation

The Russian Federation implements the Convention through a number of governmental decrees and fragmented laws and regulations. Many of these date from the period of the USSR. The law that explicitly implements CITES is the Decree of the Council of Ministers of the Russian Federation on Measures to Strengthen the Protection of Endangered Species of Wild Fauna and Flora of 8 September 1976, which reproduces the terms of the decree of the USSR Council of Ministers of 1976.

The Russian Federation's legislative controls relating to wildlife do not refer to the Convention's appendices. Controls are determined by whether a species is listed in the Russian Federation's Red Data Books of indigenous species.

The Law on the Protection of the Natural Environment of 1991 prohibits the commercial use of species listed in the Red Data Books. This applies to domestic and international trade. The law protects the tiger. Imports are not controlled, however, and the possession of unlawfully imported specimens is not, in itself, an offence.

It is not clear whether parts and derivatives are covered by some of the relevant laws. The definition in Resolution Conf. 9.6 is not recognized in the Russian Federation's legislation.

Penalties under domestic legislation are limited to fines. Under some pieces of legislation, these are administrative penalties and the criminal codes do not apply. The team was told by a number of enforcement officers that they saw this as a substantial weakness in the laws of the Russian Federation, which offered no real deterrent to illicit dealers and traders. For example, if enforcement staff simply find someone in possession of a tiger skin, with no additional evidence of illegality, no penalty can be applied. The only action that can be taken is the confiscation of the skin.

It is understood that the Russian Federation is drafting new legislation to specifically address CITES issues.

Practical controls

CITES administration

The Russian Federation declared its succession to the Convention on 13 January 1992 and it entered into force there on 1 January 1992. It had previously been a Party to CITES as part of the former USSR since 8 December 1976.

It has notified two Management Authorities and one Scientific Authority to the Secretariat.

A number of enforcement officials told the team that having to deal with a CITES Management Authority in Moscow caused delays and reduced their ability to quickly obtain advice and information. They favoured the opening of a branch or regional office in Vladivostok. Those officials already knew of the branch office system used in China and suggested that the Russian Federation should adopt a similar approach. Many officials believe that some administration problems linger on from the Soviet Union-style approach, where all power and decision-making was centralized in Moscow.

Enforcement staff

The various laws and regulations protecting wildlife that apply in the Russian Federation can be enforced by Customs officers, the Militia (Police), Border Guards, Marine Inspection and officials from the Russian Federal Forest Service and the Ministry of Agriculture and Food (that controls

hunting and fishing). The State Committee on Environmental Protection also has enforcement officials.

It is the latter that is of particular relevance to the conservation of tigers and the combating of illicit trade, although the Forest Service's 1,400 Rangers play a significant role in anti-poaching and anti-illegal logging field operations.

In 1994, as part of Operation Amba, the State Committee on Environmental Protection created Department Tiger. Recently renamed Inspection Tiger, to reflect its growing importance in the hierarchy of enforcement agencies, it is a specialized unit whose principal remit was initially to combat tiger poaching.

Inspection Tiger originally consisted of two brigades, each with ten officers, which received substantial funding from NGOs. Government funding has increased since 1994 but Inspection Tiger still relies on donor funding to a significant degree. By June 1999, there were eight brigades, spread throughout Primorski krai.

Since its inception, Inspection Tiger staff have taken action in over 1,550 instances of environmental crime. Forty tiger skins and carcasses have been seized, although no prosecutions have followed tiger-related incidents. Tiger poachers have paid SUR 16,500 in administrative penalties. Over 600 firearms (including 150 rifles), 126 snares and 2 cage traps have been seized. In 95 per cent of cases, the firearms were either of Russian manufacture or home-made. Seizures have been made, however, of high quality hunting rifles of foreign manufacture. Customs officers have noted the smuggling into the region of particularly expensive Browning-make hunting rifles.

Inspection Tiger personnel come from a variety of backgrounds but many either served as Environment Protection enforcement staff or are ex-Militia. They are empowered to carry weapons, to engage in covert operations and have developed an efficient network of informants. The brigades do not, however, have a budget to allow payments to informants. Whilst their office accommodation is fairly basic, it is equipped with computers and the brigades have communications equipment and good quality 4x4 vehicles.

From its initial remit as an anti-tiger poaching initiative, Inspection Tiger has developed into a cohesive team of men who now tackle a range of environmental crimes. Their duties have brought them into contact with criminals engaged in a variety of activities and they have responded positively. For example, during the technical team's visit, one brigade encountered and arrested persons engaged in illegal logging. They regularly take action relating to illegal harvesting of wild ginseng and sea cucumber, alongside work related to animal species.

Inspection Tiger has achieved considerable media attention; locally, nationally and internationally. The mere existence of the brigades appears to now have a deterrent effect and this has enabled them to move more towards intelligence-gathering and targeted operations, since the need for anti-poaching patrol work has lessened. The brigades also see establishing links with counterpart agencies abroad as a priority.

Inspection Tiger personnel have established an almost unique level of empowerment in the State enforcement agency system, almost equivalent to that of the Militia. Staff have carried out joint operations, and exchanged intelligence, with the Federal Security Service (previously better known as the KGB).

Of all the enforcement agencies encountered by the technical team during its missions, Inspection Tiger was the most impressive. Its personnel demonstrated high levels of commitment and enthusiasm. Indeed, their very demeanour indicated a group of officers who were intent on their task and were not to be deflected from it. It was easy to see why they have achieved such a high public profile and level of respect. The latter is especially noteworthy, given the fact that enforcement agencies in the Russian Federation do not always enjoy the respect or trust of the public.

Without exception, the team found that Inspection Tiger was also respected, although not necessarily liked, by other enforcement agencies. The team detected a degree of jealousy among some persons whose duties had previously included work now carried out by the brigades. It also heard that some persons in other agencies resented the fact that brigade staff are unwilling to show any favouritism and enforce the law regardless of the position held by anyone they encounter acting illegally. That said, a high level of co-operation appeared to exist between Inspection Tiger and other agencies.

The team was also impressed by the high level of CITES awareness displayed by the Chief of the Federal Customs Service, Special Contraband Section, for the Vladivostok area. He has attempted to raise awareness of wildlife smuggling among his staff but the team heard that Customs officers are often poorly paid and poorly motivated. The low number of Customs officials does not enable sufficient inspections in the sizeable ports in the region, especially of the very large cargo vessels that visit Vladivostok.

Illicit trade

In common with other areas of the Russian Federation, Primorski krai faces considerable socio-economic problems and the majority of its residents have very low income levels. Subsistence poaching is common and the temptation to kill endangered species, if encountered, is understandably high. One enforcement officer told the team that he estimated that there are potentially 200 hunters for every tiger in the region.

Many of the professional hunters, who might have kept within the law prior to Perestroika, are now suspected to have turned to poaching. The official responsible for hunting controls in the region told the team that he had seen a dramatic reduction in foreign field sportsmen visiting the area. Of the 500 licences to kill bears available each year, only about 100 are now issued. The official said that, historically, poaching in the region had always fluctuated in line with socio-economic stability. The same official said that poaching tended to be highest during legal hunting periods when people have an excuse for being in the forests.

The Ministry of Agriculture and Food, which co-ordinates hunting controls carries out an annual census of animals to determine the number of licences that can be issued. Its staff co-operates with Operation Amba to supply information relating to tiger prey species populations. Snaring of animals is prohibited, although it is a common method of poaching.

Five hundred musk deer licences are issued in Primorski krai each year but officials suspect that up to three times the legal limit are actually being killed. They suspect that loggers, with a legal reason to be in forest areas, are also engaging in illegal hunting.

Hunting Inspectors operate in the field and co-operate with Environmental Protection Rangers and Inspection Tiger brigades.

Primorski krai has historically suffered from high crime levels. The team was told that the city of Vladivostok had experienced violent territorial disputes between Russian Mafia groups but had become quieter in recent months as certain groups had acquired domination and gun battles in the street, at one time not uncommon, were now rare.

Enforcement officers told the team that there appeared to be little evidence of Mafia involvement in poaching or illegal harvesting. Intelligence indicated, however, that dealers who wished to move illicit goods, including wildlife specimens, abroad had to make use of, and pay for access to, the Mafia-controlled smuggling routes. It is suspected that people who trade domestically in illicit goods may be required to make 'protection' pay-offs to the Mafia.

Inspection Tiger personnel believe that there is relatively little organized poaching of tigers. Whilst poaching gangs do operate in the region, it is suspected that tigers, leopards and bears are killed when encountered whilst the gangs are hunting their primary target of deer.

The black market price of tiger skins is thought to be decreasing and there is intelligence that some stockpiling may be taking place in the hope that prices rise once more. A tiger skin can sell for USD 1,500-3,000, whilst a skeleton will fetch USD 600. The brigades were not aware of any specific demand for tiger penises. They had noted that skins were usually sold with the claws still attached. (The team was told in other range States, that claws would often be detached to be sold separately.)

Poachers were reported to sell skeletons whole to intermediaries who would split them up and sell the parts. Such 'middlemen' could be Russian, Chinese or Korean. Poachers used to sell carcasses whole but now tended to sell the skin and bones separately. This change was noted after the introduction of China's internal trade ban in 1993.

Inspection Tiger staff believes that the peak period for illicit activities was from 1991 to 1993 in the aftermath of Perestroika when border restrictions with China became less strict. During that period, it was known that one tiger skin could be bartered for a second-hand Japanese car.

The demand for tiger bones seemed to diminish between 1993 and 1995, presumably as a result of China's trade ban, and Chinese traders were not seen so often in the region. However, during 1995 and 1996, the market appeared to develop again, although Russian middlemen seemed to dominate, using already established smuggling routes to China but also to the Republic of Korea.

By 1999, the internal market in the Russian Federation for skins seemed to have developed, with rich Russians wishing to acquire skins for decorative purposes. Even so, officers estimate that 70 per cent of tiger skins still go to China, Japan and Korea.

Customs officers still regard Japan, China and Korea as the main destinations for tiger parts and derivatives. Whilst most seizures by Customs staff occur at vehicle and train border crossing points and at airports, it is by sea that most smuggling is thought to take place. The sheer size of vessels, and the numbers, using the port of Vladivostok does not allow for sufficient inspections to enable many interceptions. Intelligence suggests that sailors are being well paid to act as couriers.

The team was told of one seizure of tiger bones that were being shipped inside a large jar of vodka. At the time, Customs presumed the alcohol was being used to conserve the bones. In the light of what the team learned in other range and consumer States, it might be that the bones were being shipped whilst the medicinal preparation process had already started.

Customs officers encounter a range of specimens of CITES-listed species during inspections.

7 kg of bear gall had been seized at Vladivostok airport in 1999. The illicit shipment contained 143 bear bladders, thought to have come from Kamchatka in the north-east, and musk pods from Primorski krai. 22 bear paws, apparently destined for China, had been seized in 1999.

The team was told of seizures by Customs in the far north-east of the country of seal skins, polar bear carcasses, and seal and walrus penises, all apparently destined for the United States of America. Illegal trade in whalebone souvenirs and carving also occurs between that part of the Russian Federation and Alaska.

Customs regard the illicit shipments of caviar from the far east of the Russian Federation to China, Japan and the United States of America as a significant problem. Shipments of caviar, some as large as 10 tons, have been intercepted.

Illicit trade in wild ginseng from the Russian Federation was described to the team as a serious problem for enforcement agencies. Populations of wild ginseng in the Russian Federation are not, however, presently CITES-listed. The team was told that a proposal to list them is likely to be submitted to the 11th meeting of the Conference of the Parties. If such a listing occurs, the

Russian Federation will undoubtedly need the assistance of other Parties in the Asian region to combat the trade.

One researcher made known to the team his concern that the authorities have a practice of destroying any skins or bones that are confiscated. He suggested that, instead, such items should be made available for scientific research projects, particularly as he felt more work requires to be carried out on the identification of tiger bone. The same person expressed concern to the team that insufficient work was being carried out relating to the Amur leopard, which he believed was also suffering from illegal hunting.

Traditional medicine

There does not appear to be any significant traditional or historical demand in Primorski krai or Khabarovski krai for TM products that use tiger parts or derivatives.

Customs officials do, however, encounter some smuggling of medicinal products allegedly containing tiger parts and derivatives into Primorski krai. It is believed that these are to meet the small demand from ethnic minorities in the region, particularly Russian-Koreans.

They have also seized a type of Cognac, made in China, that contains bear gall bladder. A 200g bottle of this alcoholic tonic costs SUR 600 but such seizures are very uncommon.

Education and awareness

Enforcement staff

Inspection Tiger personnel were found to have a thirst for knowledge of international crime modus operandi outside the Russian Federation and of the targeting techniques used elsewhere to combat such activities. (The CITES Secretariat subsequently supplied some material but is confident that more would be welcomed)

The team discovered that knowledge of the Convention was generally limited among brigade members.

The general public

Inspection Tiger brigades, especially those engaged in field duties in reserves, have attempted to raise general awareness of conservation issues among villagers and some work has been done with campaigns targeted at young people.

A number of NGOs have assisted in the production of campaign material, especially posters, to increase awareness of CITES issues, alongside more specific tiger conservation material.

The team noted large posters relating to wildlife trade displayed at Vladivostok airport.

Realistically, the team believes that the general public probably has a relatively good understanding of the need for conservation and the law relating to wildlife. Primorski krai and Khabarovski krai are renowned in the Russian Federation for their beauty and as being the last stronghold of the Amur tiger. Large sectors of the public, however, have seen dramatic changes in their lifestyles since Perestroika and the team believes that it will be socio-economic factors, rather than education campaigns, that will dictate their willingness to resist any temptation to engage in illicit activities.

Aspects for Improvement

The technical team was very impressed by Inspection Tiger and the personnel it met. It illustrates very well why more Parties should make use of specialized units. The team **recommends** that Operation Amba, as a whole, continue to receive government and donor funding. The team also

suggests that the Russian Federation consider empowering Inspection Tiger so that it may have a co-ordinating role, among enforcement agencies at regional level, whilst combating wildlife crime.

The team **agrees** with the comments it heard from many sources that the legislation of the Russian Federation requires to be improved urgently. In particular, it **suggests** that offences involving specimens of CITES-listed species should become crimes at law. Further, especially since many citizens simply cannot afford to pay fines, the team **suggests** that imprisonment should be incorporated as a sentencing option in any new legislation.

The technical team **calls upon** range and consumer States to supply information to the Russian Federation that will assist its enforcement agencies in combating illicit trade. The team also **encourages** appropriate Parties to provide training and advice to the personnel of Inspection Tiger to assist them in further development of their skills.

The team **agrees** with comments received from some officials that the Russian Federation should consider establishing branch CITES offices.

UNITED KINGDOM

Tiger conservation issues

There are no wild tiger populations in the United Kingdom. The United Kingdom government has a long history of providing financial and practical support to conservation initiatives around the globe. Many of the most influential NGOs in the field have their headquarters in the United Kingdom.

Legislation

The United Kingdom implements the provisions of CITES via European Union law, i.e. Council Regulation (EC) No. 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, and Commission Regulation No. 939/97 of 26 May 1997. Domestic implementing legislation includes the Control of Trade in Endangered Species (Enforcement) Regulations 1997 (COTES). Use is also made of a number of other domestic statutes that provide for protection of wildlife and enable enforcement action by relevant authorities and courts.

Of particular importance when considering trade in tigers in the United Kingdom is the fact that the country is a member of the European Union (EU), and that as a consequence of the realization of the EU Single Market, there are no CITES controls on trade in wildlife within or between EU Member States. However, the EU Regulations prohibit all commercial trade in specimens of wild origin of species listed in its Annex A (roughly equivalent to CITES Appendix I, and including tigers). Commercial importation and re-exportation of Annex A species are also prohibited. In practice, therefore, there is a complete ban on the trade in tigers and tiger products in the EU, including purchases, offer to purchase, use for commercial gain, sale, keeping for sale and transport for sale, unless the Management Authorities have granted specific exemptions.

In defining the term 'specimen' the EU Regulation makes clear that this includes all products that contain or appear by packaging, marking or labelling to contain parts or derivatives of CITES species. Such an interpretation is a recommendation of Resolution Conf. 9.6.

COTES provides significant powers of enforcement, search and seizure and enables courts to impose substantial fines and/or imprisonment for periods up to two years. Forfeiture of specimens in respect of which an offence was committed is mandatory and the power to order forfeiture of vehicles and equipment used to commit an offence is available.

The Customs and Excise Management Act 1979 provides customs with the powers to seize illegally imported or exported goods. The Act provides for penalties of a maximum of seven years imprisonment and an unlimited fine.

The United Kingdom has designated ports for import and export of CITES specimens.

At present there are limited legislative controls on the sale or supply of particularly toxic plants used as medicines. Specified plants are restricted to sale only from registered pharmacies or by herbal medicine practitioners up to maximum doses laid down in law. Regulatory arrangements for herbal medicines, currently under review will impinge upon the traditional medicine sector. This sector, along with other herbal interests, is actively involved in constructive dialogue with the regulators, with the common aim of balancing consumer choice and consumer safety. Any changes to the current regime would probably include improved labelling requirements.

Whilst there may be some potential for other statutory agencies to become involved, such as trading standards offices, it appears, that the control of endangered species ingredients is highly likely to remain primarily within the remit of the Customs and Police.

Practical Controls

CITES administration

The United Kingdom ratified the Convention on 2 August 1976 and it entered into force there on 31 October 1976. Several Management and Scientific Authorities have been notified to the Secretariat.

Administration of controls is a matter for the United Kingdom's CITES Management Authority, which is based within the Global Wildlife Division of the Department of the Environment, Transport and the Regions (DETR). DETR has approximately 70 part-time Wildlife Inspectors but they tend to concentrate on inspections relating to registration of live specimens, particularly birds, and their potential involvement in regulation of tiger specimens appears very limited, as are their enforcement powers under the law. These individuals play a useful ancillary role in administrative controls but it is understood that it has never been intended that they should form a truly specialized enforcement group.

Whilst DETR has a considerable database of applications for permits/licences, which might be made use of as an investigatory tool, relatively few applications for tiger permits/licences are made and the information available on tigers is therefore correspondingly low.

Enforcement staff

Enforcement of CITES-related controls in the United Kingdom is primarily the responsibility of Customs and Police officers. It is important to note, though, that enforcement action by Customs and Police, in practice, is somewhat limited or restricted and this is addressed further below.

HM Customs and Excise established a CITES Enforcement Team at London Airport in 1992. The team's eight members are devoted, on a full-time basis, to the inspection of shipments and anti-smuggling work. Standard targeting and risk-assessment techniques are employed to identify suspect shipments. Considerable success has been obtained and many thousands of specimens have been seized, including shipments in transit. Important prosecutions have taken place. Whilst most actions have taken place at ports, team members have also assisted in enquiries relating to internal sales, post-import and pre-export matters. The team has built up a well-deserved international reputation for enforcement action. The proven operational worth of such specialized units is **commended** to other Parties.

To complement the work of the CITES Enforcement Team, HM Customs and Excise has appointed CITES Liaison and Intelligence Officers (CLIOs) throughout the United Kingdom who perform CITES-related functions alongside their normal duties.

A National Intelligence Co-ordinator was appointed in 1997 and this officer collates information and disseminates it to the Enforcement Team and CLIO network. It is too early to gauge the success of this initiative.

There is no national police force in the United Kingdom. Instead, over 50 different police forces enforce the law in regions that often are defined by single or multiple local government boundaries. Scotland, whilst having police forces that replicate those elsewhere in the United Kingdom, has a separate and different legal system.

The Police have no specialized wildlife law enforcement units. Instead, since the mid-1980s, most forces have established the post of Police Wildlife Liaison Officer (PWLO). As with CLIOs, most PWLOs carry out wildlife law enforcement duties alongside their normal work. The majority are volunteers and are uniformed operational officers who may not be familiar with international wildlife trade. They may also not have an investigative background.

Although the primary workload of PWLOs consists of enforcing domestic wildlife law, investigations into CITES-related matters are becoming increasingly regular.

During the period 1995-1998, the United Kingdom supported the work of the CITES Secretariat by seconding firstly a Customs officer and then a Police officer to work in the Secretariat's Enforcement Assistance Unit. This support, pursuant to Resolution Conf. 9.8 (Rev.) is **commended** by the team and it urges Parties to follow this example.

However, the team believes that the United Kingdom has come to something of a crossroads in relation to enforcement. It repeatedly heard from front-line staff of their lack of resources and time to carry out enquiries. Although efforts are being made to improve the situation, relatively little specialized training is available for PWLOs and CLIOs. Some NGOs believe that they are having to provide the knowledge that is not present among some authorities and that they are engaging in enforcement operations in a manner that may not be truly appropriate for what are often charitable organizations. NGOs also observed that PWLOs were hampered by the part-time aspect of their wildlife law enforcement duties and that, on occasions, resulted in lengthy delays between action and cases coming to court.

Enforcement staff also commented that lack of support from senior management meant that obtaining authorization for covert operations was unlikely, although it is accepted that recently introduced legislation governing surveillance practices would seem to preclude the use of such tactics in respect of wildlife crime.

There appears to be a lack of national co-ordination of enforcement action. Importantly, although the Police and Customs work well together on a case-by-case basis, there is the very real risk of one agency compromising the work of the other since no routine communication or co-ordination of enquiries takes place. The sheer number of police forces does not allow for a ready overview of illicit trade. Further, all crimes against wildlife legislation are not recorded in national statistics although the team understands that efforts are underway to at least partially rectify that. The team noted the fact that PWLOs are not empowered under present legislation to arrest suspects in wildlife crime cases. Consequently, suspects either cannot be interrogated or the ability of the Police to do so is greatly restricted. This shortcoming apparently does not apply in Scotland, where the legal system allows for the detention of suspects for questioning in a CITES-related case.

The lack of national co-ordination has prevented the Police from engaging in countrywide education and awareness campaigns, with one exception in Scotland. However, some forces, especially the Metropolitan Police, have produced excellent promotional material within their own areas.

Whilst central government has clearly, in the public domain, set great importance upon wildlife crime, there appears to be little direction from the government to include this in the priorities of the enforcement bodies, especially the Police. The team **commends**, however, the willingness

of government, via DETR, to fund education and awareness initiatives, together with forensic science research.

Senior management, particularly within the Police, is reported to be irresolute towards wildlife crime and it receives a low priority in most forces. It is, therefore, all the more **commendable** that so much appears to have been done by a relatively small number of dedicated individuals, often of junior rank. The team **agrees** with the observation of several NGOs that wildlife law enforcement attracts considerable acclaim for the Police and Customs and that such work is very good for their public image. It also believes that the majority of the public welcomes and supports such work. NGOs also voiced their anxiety that expectancy levels may be created that cannot, in reality, be met by the current resources.

Illicit trade

The United Kingdom has long been recognized as a major destination of legal and illegal wildlife trade.

The technical tiger mission team was advised that significant numbers of traditional medicine products purporting to contain tiger derivatives are seized entering the United Kingdom each year. Many of these seizures take place at the seaport of Felixstowe and are commercial in nature. Commercial shipments of packaged patent medicines that contain or claim to contain tiger bone may also be concealed in larger shipments of Chinese goods and herbs. It is also suspected that illegally imported medicines are entering the United Kingdom from other EU Member States. Customs officers also see a range of medicines containing specimens of other endangered species, however, and have noted a recent increase in products claiming to contain leopard bone. It has also been noted that it is now increasingly common for products to arrive in packaging that is identical to that seen previously but with all reference to endangered species ingredients removed.

Customs officers made the observation that, owing to the legalized freedom of movement within the EU, it is very difficult to estimate the number of specimens that may be entering the United Kingdom, without inspection or Customs control, from other EU Member States.

In 1995, the Metropolitan Police Service launched 'Operation Charm' in London. This enforcement action followed information from TRAFFIC of traditional medicine products containing ingredients from endangered species being openly offered for sale in a number of TM pharmacies. Seizures of products purporting to contain tiger bone, rhinoceros horn and bear bile resulted and prosecutions took place. Similar raids were conducted in the Chinatowns of Birmingham and Manchester. In each of the three cities, thousands of medicinal products were seized, the majority of which appeared to have originated in China. In addition to the medicinal products, significant amounts of raw materials were recovered, including unprocessed tiger bones. To date, over 20,000 items have been seized during Operation Charm.

The authorities and NGOs agree that Operation Charm, and other enforcement activities, as well as numerous public awareness campaigns, have led to a steady decline in the open sales of medicinal products purporting to contain ingredients of endangered species. Their continued seizures during import controls demonstrate that a persistent underground market continues to exist for such products, while the removal of references to endangered species from packaging suggests that traders are aware of the illegality of their actions.

Police officers have noted an interest in skins of tiger and other exotic species. It is believed that a number of fraudulent applications have been made to the CITES Management Authority of the United Kingdom for sales exemption certificates to authorize domestic sales of tiger skins.

Traditional medicine

The team met with an official of the Register of Chinese Herbal Medicine (RCHM), which is a voluntary professional body for practitioners of Chinese Herbal Medicine in the United Kingdom.

The official acknowledged the historical use of endangered species in medicines but emphasized that its members were forbidden from using such products. The Register's promotional material to members reinforces this stance. The Register currently has some 360 members but it is forecast by RCHM, due to the current rate of membership applications, this will rise to over 2,000 by the year 2005. Of the current membership, only 50 per cent are of Chinese origin or descent. The other half are British. The majority of practitioners are based in the south east of the country. The official estimated that some 98 per cent of medicinal products in use relied upon plant ingredients, with the remaining two per cent employing animal and/or mineral ingredients. The team, however, felt that this estimate did not reflect what was seen on display in pharmacies and that the use of animal and mineral ingredients is higher.

The team, during discussions with RCHM and visits to and inspections of pharmacies quickly noted that TM consumers are equally divided between ethnic and 'western' clients. It believes this factor to be of great importance, particularly in the design and targeting of awareness campaigns. The growing interest in alternative medicine among the public in the West must not be ignored. Indeed, the RCHM has conducted a survey of its members with regard to their clientele and the team commends the results to authorities in the United Kingdom, as it may assist in designing public awareness programmes. Interestingly, the average patient would appear to be white, adult, middle-class and female. It is important to note, however, that the survey included patients receiving acupuncture, so this may not be a true reflection of demand for TM products.

The team further noted the widespread use of prescription by practitioners whose clients will thereafter go to a pharmacy to obtain the medicine. Whilst manufactured products are widely available in the United Kingdom, many practitioners and pharmacies also make up medicines from raw ingredients at the time of supply. RCHM is promoting the concept of a professional body or association for wholesale suppliers and importers of medicines and estimates there to be 14 major firms engaged in such trade in the United Kingdom.

It was suggested by RCHM that an important distinction in tackling traditional medicine issues has to be made between what may be seen as truly effective and proven treatments and those that continue to be used that perhaps can be more accurately described as 'folk remedies'.

Special projects

HM Customs and Excise funded the development of the Green Parrot Project, a computerized species identification guide that employs CD-ROM technology. The system is now being produced commercially for use by enforcement agencies only and the team is aware that it is now in use outside the United Kingdom. The system incorporates a useful database of traditional medicine products that is currently being expanded. The team is aware that the U.S. Fish and Wildlife's Forensic Laboratory also has such a database and has **encouraged** co-operation and an exchange of information between the United States of America and the United Kingdom.

The year 1995 saw the launch of the United Kingdom's Partnership for Action Against Wildlife Crime (PAW). PAW aims to bring together all the statutory and non-statutory organizations involved in combating wildlife crime throughout the nation and to provide a strategic overview of enforcement activities. Re-structured in 1998, PAW now provides an opportunity for all relevant governmental and non-governmental groups to contribute, whilst a Steering Group of government, Police and Customs officials guide PAW's activities. The Partnership currently has six working groups examining: DNA fingerprinting and other forensic techniques; conference and training; data exchange and management; publicity; legislation; Scotland. Education and awareness actions by PAW are discussed below.

The technical tiger mission team believes this initiative demonstrates the success that can be achieved through multi-agency co-ordination and consultation and **commends** this approach to other Parties. The contribution by the NGO community is particularly effective and significant in this forum. The team also noted the regular support provided to Police and Customs by NGOs, particularly TRAFFIC, during operational law enforcement and investigations.

The team was advised that the United Kingdom's Forensic Science Service, with funding assistance from DETR, has engaged in wildlife law enforcement research. In particular, DNA profiling to enable identification of tiger parts has been undertaken. Whilst the Service is apparently confident of its ability to distinguish tiger specimens from those of other species using the techniques developed, it is encountering difficulty in obtaining examples of traditional medicine products known categorically to contain, for example, tiger bone. Without such items, it is unable to test its procedures and thus its ability to detect the presence of tiger bone in medicinal preparations. The team **commends** this work and **seeks** the co-operation of range States in making available products for use in this important research project.

Education and Awareness

Enforcement authorities and the judiciary

Whilst studies in this category may understandably focus upon the general public, the team felt it was equally important to examine efforts made to educate and make aware those who have the potential to enforce the Convention and also the judiciary which has to deal with offenders. The former is perhaps especially relevant in the United Kingdom given its CLIO and PWLO network of officers who may not have ready access to training and/or detailed information.

It is in this sphere that PAW has done much of its work. In 1996, 'Wildlife Crime: A Guide to Wildlife Law Enforcement in the UK' was published at the expense of central government and copies were supplied to PWLOs. A second edition was published in 1998 and this is available at the DETR's Web site. Further publications relating to the use of DNA technology and a directory of forensic science expertise have also been distributed.

In 1998, WWF-UK, TRAFFIC International, the Royal Society for the Protection of Birds, PAW and DETR jointly funded a reference manual, entitled 'By Hook or by Crook', on illegal wildlife trade and prosecutions in the United Kingdom. Over 2,000 copies are to be distributed to Police, Customs and, importantly, the courts. This attempt to raise awareness and provide detailed information to the judicial system is **commended** by the team, which believes this example worthy of being copied by other Parties. There are many examples from around the globe where prosecutors and judges have seemingly failed to recognize the significance of illicit wildlife trade or did not have the technical background information, training or practical experience to act appropriately.

Traditional medicine practitioners and consumers

Following upon its enforcement action in Operation Charm, the Metropolitan Police hosted a seminar in 1996 bringing together TM practitioners and traders with a view to explaining the law protecting endangered species and the reasons for the law. At the seminar a 'sticker' scheme was launched by which any TM trader who signs a simple undertaking that they will not knowingly trade in endangered species can obtain a Metropolitan Police window sticker that demonstrates their commitment to trade lawfully. The scheme appears to have achieved some success and, to date, over 100 traders have joined. This is, however, only a relatively small part of the estimated 600 TM practitioners and traders who operate in London and of the estimated 3,000 in the whole of the United Kingdom. In addition, the monitoring of the implementation of the scheme seems to have been limited in time and scope. The possible impact of the stickers on the behaviour of traders and/or consumers has not been evaluated.

Around the same time as their seminar, the Metropolitan Police initiated a period of amnesty where traders were given the opportunity to surrender illicit products without fear of prosecution. Not a single trader took advantage of the offer. The team spoke to some practitioners and pharmacies about the lack of response and formed the opinion that, particularly among ethnic communities, there was a lack of trust in the authorities.

Similar moves in the United Kingdom, targeting offensive weapons and firearms, have enjoyed considerable success in the past. Such initiatives, in relation to CITES specimens, potentially have national, regional and international consequences. The team is of the opinion that any similar initiatives in the future, relating to what is a highly specialized trade, should receive considerable thought and co-ordination. It is wary, for example, that an amnesty offered in London could undermine enforcement efforts taking place elsewhere in the United Kingdom or abroad.

At a national level, DETR, in consultation with the Police and Customs, published and distributed a leaflet entitled, 'Oriental Medicine and Endangered Species', which outlined the legislation, the impact of unsustainable use upon endangered species and promoted the use of alternative medicinal products. The leaflets were in English and Chinese.

The team observed that there appeared to be a reasonable level of awareness amongst the TM practitioners and pharmacies of the risk posed to endangered species by unsustainable use. It noted, however, that this may be restricted to the better-known species, such as tiger, rhinoceroses and bears, whilst a full appreciation of CITES controls is not widespread. It noted, for example, that a list of controlled species that RCHM distributes to its members contained errors and many omissions.

Whilst educational campaigns conducted in the United Kingdom have been of good quality and imaginative, when set alongside work done elsewhere in the world the team is wary that they may interpreted by the target audience, especially ethnic communities, as having been prepared in isolation. It **suggests** that a greater involvement of the TM community, both in the preparation of texts and also in the delivery of the message itself, may help avoid the risk that consumers feel they are being talked down to. Experience also suggests that information received from peers is more likely to be listened to.

The team raised the issue with United Kingdom authorities of research conducted in the United States of America that demonstrates the presence of toxic ingredients in some TM products. The team was disappointed that little interest was shown in this subject. It believes that awareness of such research is important from the simple aspect of public safety but also because it may be an important factor in public education and awareness initiatives. It **recommends** that the authorities reconsider obtaining information on the subject.

On the day of the launch of the CITES Tiger Missions, the United Kingdom's CITES Management Authority also launched a poster drawing attention to the plight of the tiger, its place in traditional medicine and promoting the use of alternative remedies. The poster has been produced in English, French and Spanish versions and, in each case, the text is also provided in Chinese. The United Kingdom has offered to supply copies of the posters to any Party that wishes them.

The general public

DETR and HM Customs and Excise have, for some considerable time, engaged in a campaign aimed at persons travelling abroad that uses leaflets and posters to inform the public about CITES and encourages them to take care when buying wildlife products abroad.

Customs also arrange for CITES displays at airports, public shows and museums to increase public awareness. They also donate seized specimens to selected zoos, and museums for educational purposes, which has been found to have a particularly beneficial impact on children (the future consumers).

The team took note of an interesting initiative taken by WWF-UK. Their 'Eyes and Ears' campaign was launched in 1996 to raise awareness of wildlife trade issues and to encourage members of the public to come forward with any information on illegal trade. The campaign includes an information pack, which the public can ask to be sent to them, and promotes a telephone number to call to supply information. Information reports are screened by TRAFFIC

staff who pass worthwhile information to the Police or Customs. WWF has received thousands of requests for packs and hundreds of 'tip-offs'. Two prosecutions for cases relating to tigers have resulted. The promotional material is high quality and was expensive to produce. The team believes, however, that this scheme is worthy of replication elsewhere and **commends** WWF for its work in this field. Care should be taken, however, that all information and allegations are professionally screened. Information distributed to the public must clearly differentiate between legitimate wildlife trade and infractions against national and international legislation.

Aspects for Improvement

The United Kingdom has undoubtedly engaged in some very worthwhile and imaginative initiatives, especially under the auspices of its Partnership for Action Against Wildlife Crime. The degree of co-operation between statutory bodies and NGOs is **highly laudable**. The United Kingdom has also clearly significantly expanded its efforts against wildlife crime in recent years.

The team **suggests**, however, that the degree of illicit wildlife trade involving the United Kingdom justifies the establishment of a national co-ordinating team or unit that should comprise members of the statutory enforcement agencies. It is the next logical step in the country's approach to wildlife law enforcement.

The team noted a general lack of international liaison by United Kingdom enforcement bodies, especially in the follow-up to seizures. It believes this may result from a number of factors: lack of resources; lack of senior management support; lack of serious crime investigation experience among some PWLOs and CLIOs; lack of reliable contacts and communication lines abroad; lack of operational structures at EU and other levels; and language barriers. The team **suggests** that more routine contact with counterparts abroad, either direct or via Interpol or the World Customs Organization, would not only assist in identifying offenders and illicit trade routes but would notify relevant nations of illicit exports or re-exports across their borders.

The team agrees with the comments of the Police and some NGOs that fraudulent application for sales exemption certificates for skins of exotic species and mounted specimens, including tiger, should be made more difficult. It **suggests** that the requirement of identification of individual skins and specimens, either by marking or photograph, could reduce the opportunity for such fraud. Chapter VI (Articles 34 to 38) of Commission Regulation (EC) No. 939/97 provides guidance on marking that could be useful in this area.

UNITED STATES OF AMERICA

Tiger conservation issues

There are no wild tiger populations in the United States of America.

There is considerable captive breeding of tigers in the United States of America. Although, it appears that the total number of captive-bred animals is unknown, the team heard it alleged that it might equal, or exceed, the total wild populations. There are no federal regulations requiring mandatory registration of all tigers in the United States of America. The tiger is, however, listed under the Endangered Species Act, which prohibits the import, export, take, interstate commerce, sale and offer to sell in interstate commerce, and other activities of live or dead listed-animals and their parts or products. These activities may be exempted with a permit or by abiding with captive-bred wildlife regulations that allow certain activities, if shown to enhance propagation or survival of live animals only.

The Government of the United States of America has a long history of aiding foreign States through the provision of conservation funding and practical assistance and training, especially by staff from the U.S. Fish and Wildlife Service. A significant number of important wildlife conservation NGOs, many involved in tiger projects in range States are based in the country.

Legislation

CITES controls are primarily enforced in the United States of America via the Endangered Species Act of 1973, which provides for fines of up to USD 100,000 and/or up to one year in prison. Various other statutes and regulations, many non-wildlife related, may also be employed. In particular, where it can be shown that specimens were obtained abroad illegally, the Lacey Act may be used. This carries penalties of up to USD 250,000 and/or five years in prison. U.S. Customs and other federal statutes may also be relevant in dealing with smuggling cases.

In late 1998, the Rhinoceros and Tiger Conservation Act of 1994 was amended to provide for the prohibition of “the sale, importation and exportation of products intended for human consumption or application containing, or labeled or advertised as containing, any substance derived from any species of rhinoceros or tiger.” Penalties under the Act are up to six months imprisonment and a maximum fine of USD 12,000. The amendment also requires the Secretary of the Interior to develop and implement a public education programme in the United States of America for the conservation of rhinoceros and tiger species. Congress did not, however, provide any funds for implementation of the Act.

It appears that the amendment does not relate to live animals or skins.

The amendment to the 1994 Act closed what many NGOs regarded as a domestic sales loophole that was being exploited. The Endangered Species Act prohibits the sale and possession of illegally imported CITES specimens. The burden of proving illegal import falls upon the prosecution, however, and relatively few cases have been prosecuted under this provision. Otherwise, the Endangered Species Act does not generally prohibit any internal domestic sale or possession of Appendix-I species. Interstate commerce, however, is prohibited for species listed as endangered under the Endangered Species Act, including the tiger. States may regulate internal sale and possession within their jurisdiction but few do.

The Federal Food, Drug and Cosmetic Act regulates herbal medicines labelled for the cure, treatment, prevention or mitigation of disease. This legislation requires that a drug must meet all mandatory requirements, including adequate directions for its intended use. The Act also prohibits any drug regarded as being “adulterated”. This part of the law can be used against medicines found to have toxic ingredients.

The United States of America has designated ports for import and export of CITES specimens.

Practical Controls

CITES administration

The United States of America ratified the Convention on 14 January 1974 and it entered into force there on 1 July 1975. It has notified one Management Authority and one Scientific Authority to the Secretariat.

Enforcement staff

The United States of America has surely the largest number and variety of law enforcement agencies of any nation in the world. Whilst this, together with differences between federal and state law, can offer potential for confusion and complication, it must be recognized that a multi-agency approach perhaps has a greater scope there than elsewhere.

CITES-related legislation is primarily a matter for the U.S. Fish and Wildlife Service (USFWS). Its Office of Law Enforcement, through Wildlife Inspectors and Special Agents, is responsible for enforcing federal laws. In practice, it is not unusual for Inspectors and Agents to work along with other federal agencies as well as State Game and Fish Wardens, Sheriff's Offices, etc.

Wildlife Inspectors and Special Agents of the USFWS enjoy a well-deserved international reputation for effective enforcement.

Food and Drug Administration (FDA) Inspectors also engage in enforcement action against illicit imports.

Illicit trade

Wildlife Inspectors of the USFWS continue to seize shipments of TM products purporting to contain ingredients of endangered species, including tiger. Like their British counterparts, however, they have noted an increase in the apparently deliberate removal of references to endangered species from product packaging and labelling.

Routine inspection of TM pharmacies in California has found little evidence of illicit products being offered openly for sale. It is acknowledged that this may well reflect the recent change in legislation on domestic sales and the effect of public awareness programmes, whilst also indicating that sales may have gone 'underground'. This was confirmed by controlled deliveries, where shipments were accepted by Korean pharmacies, although no products were openly displayed on the premises.

USFWS Wildlife Inspectors have observed shipments of raw products, apparently for use in traditional medicine, arriving with vague declarations as to their content. Shipments consisting simply of TM packaging and labels are seen to arrive separately and it is apparent that the final products will then be manufactured once inside the United States. These shipments are clearly intended to circumvent the strict control that would follow were they declared as TM products.

The team was told that current estimates indicate that one half to three-quarters of TM shipments arriving in California have their country of origin (in Customs terms) as Hong Kong.

The team was rather surprised when speaking to enforcement officials that there appears to be little domestic interest in tiger skins within the United States. This is in contrast to many other developed nations. Although the Rhinoceros and Tiger Conservation Act amendment does not prohibit sale and possession of tiger skins, as it does some other tiger derivatives, the Endangered Species Act does prohibit sale, possession and other activities in interstate commerce of federally listed endangered species, including tigers.

Traditional medicine

Of great significance is the work done by the FDA in relation to the identification of toxic ingredients within TM products. They have been assisted in this by the USFWS laboratory. Hazardous levels of such substances as mercury and arsenic have been detected in a range of products. Indeed, the team met with an FDA official in California who, approximately once a month, will have a case referred to him by a hospital (often an emergency department) of a person or persons suffering from poisoning or other harmful side-effects following ingestion of a TM product. Fatalities have occurred and liver failure, often necessitating transplant treatment, is a regular injury to victims.

Interestingly, and importantly for the design of awareness campaigns, the majority of victims are non-Asian. This, too, reflects experience elsewhere of the growing interest in the West in alternative medicine.

Another factor was raised on this theme that the team feel is very important in dealing with TM practitioners and pharmacists. The simple fact that something is traditional does not necessarily make it valuable or, importantly, safe. Historically, mercury and arsenic have apparently played a significant role in TM. The TM community should be encouraged to take cognizance of the problem of toxicity aspects just as much as those of endangered species ingredients.

The technical team **commends** the work done by the FDA in these fields.

The control of TM practitioners and pharmacies in the United States of America is dependent on state law, which varies considerably throughout the country. 37 states do, however, license or otherwise regulate practitioners. It is estimated that there are some 10,000 licensed practitioners across the nation and a further 5,000 waiting to graduate from the 40 TM schools in the United States of America. Only one quarter of students come from an Asian background.

Practitioners and pharmacists with an Asian background are more prevalent in the west of the United States of America whilst in New York, for example, the balance is estimated at being 50/50.

Special projects and assistance

In April 1996, a Herbal Medicine Import Task Force was created in California with a view to tackling illegal import of toxic substances, unapproved drugs posing a risk to public health and protected wildlife products. The force, co-ordinated by the U.S. Attorney's office, brings together the U.S. Customs Service, U.S. Department of Agriculture, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Food and Drug Administration, Internal Revenue Service and the California Department of Health Services.

Beginning with an awareness programme encompassing presentations, lectures and mailings to community leaders, trade associations, individual importers and Customs brokers, the task force has attempted to balance educational and awareness issues alongside positive enforcement action. Representatives of each agency meet regularly to discuss progress and plan initiatives.

An example of enforcement action has been the occasional targeting of all passengers from flights arriving at Los Angeles Airport from Asia, with each agency searching for violations of the legislation relevant to them and drawing attention of colleagues to matters relevant to them. In one case, 210 passengers disembarking from a flight from China were subjected to strict control. Forty-five violations of federal law were detected, including 12 relating to medicines containing endangered species.

The task force is viewed as having been very successful and it is hoped that such schemes will be expanded to many other parts of the United States of America. A comparable task force has been created in San Francisco. The team was impressed by the initiative's blend of awareness and enforcement and **commends** it to other Parties.

A multi-agency approach is clearly essential given the massive amount of trade movement through major ports. Nowhere is the problem better illustrated than in California. Long Beach Harbour is now the third largest ocean port in the world, with most of its shipments originating in Asia. Seventeen thousand wildlife shipments arrive in the Los Angeles area each year. Eighty per cent of the live animal trade to the United States of America passes through Los Angeles. Such statistics make plain why targeting and risk assessments are vital. The USFWS clearly benefits from its close working relationship with other federal agencies, particularly Customs.

The team was provided with a demonstration of a relatively new initiative by the USFWS where a dog and handler have been trained to operate, primarily at ports and among passengers, with a view to detecting the smuggling of illicit items. The dog, a labrador in this case, is able to scent bear gall and parrot feathers. It is hoped to extend the range of specimens that dogs can be trained to react to.

The team was impressed by the capabilities of the dog and also noted the considerable public relations and deterrent potential this initiative offers. The team **commends** the initiative to other Parties.

Also of international repute is the U.S. Fish and Wildlife Service's Clark R. Bavin National Fish and Wildlife Forensics Laboratory in Ashland, Oregon. The laboratory has a policy of providing

its services free to any CITES Party and of publishing the findings of its research on the Internet for the benefit of all. The team **commends** the facility to all Parties.

With regard to the tiger, the laboratory has done a great deal of work in morphological and chemical methods of species identification. Alongside this, it has attempted to detect the presence of tiger ingredients in the substantial number of medicinal products seized by the USFWS that purport to contain such. The approach has primarily been one of seeking traces of calcium, employing the logic that, if a medicine is claimed to contain tiger bone, then the presence of calcium will, at least, confirm the existence of bone itself. The laboratory saw this as a useful and practical starting point, before having to proceed to the development of a test that would then specifically identify bone from tigers.

Of the tests made on such items, not one has detected the presence of calcium. Consequently, those results give reasonable grounds for suspicion that such medicines do not, in fact, contain any bone at all, either from tiger or any other species. This suggests that many of the products that are being smuggled and offered for sale are fraudulent.

Education and awareness

Traditional medicine practitioners and consumers

Very considerable work has been carried out in the United States of America with regard to traditional medicines, both by federal agencies and by non-governmental organizations, over many years. This has enabled the various approaches to education and awareness programmes to be evaluated. Although much remains to be done, the United States of America is undoubtedly a source of experience that others can draw upon.

The technical team saw numerous examples of the efforts being made to educate the public and to promote awareness of endangered species issues. Overall, what was most impressive was the multi-agency involvement but, particularly, using community groups and professional associations to get the message across. Whilst this must inevitably require time and resources in firstly improving awareness among these potential conduits of information, it seems highly worthwhile since one then achieves the vital peer group pressure, albeit subtle, to assist in the changing of attitudes and spreading of awareness.

Those first efforts may not have to be so intensive as one might expect. The team was impressed by the way in which a variety of individuals, respected by their community or professional colleagues, had rapidly seen the importance of preserving endangered species. So much so, that very recent campaigns have required relatively little, if any, government or wildlife NGO funding. The communities and associations themselves seemed only too willing to become involved in what they recognized as vital conservation issues and saw education and awareness programmes as a means of providing assistance. The team heard of work being carried out in various parts of the United States of America involving the Cambodian, Chinese, Korean and Vietnamese communities.

The team **commends** the efforts made by the Chinese community to involve officials from Chinese embassies and consuls in the United States of America, particularly when launching campaigns.

The team observed that Chinese communities in California have incorporated material targeted at children in their awareness campaigns and this appears to have been well received.

The team formed the impression that some of the medical fraternity in the United States of America is gradually recognizing that TM can compliment 'western' medicine. The University of California has a school that is concentrating on integration issues between the two types of medicine. As an example, the team was told of the manner in which TM can help reduce the

unpleasant side effects of radiography experienced by cancer patients. It also appears accepted that TM can often be highly efficacious in treating skin disorders.

Although it is felt that TM is much more important to first generation immigrants, who may not seek out western doctors at all, the team was impressed by the need for everyone to avoid trivializing traditional remedies and products. There is little doubt that campaigns that seek simply to turn people away from TM will be counter-productive.

A useful comment for those considering designing campaigns seeking to encourage people not to use TM with endangered species ingredients came from a Vietnamese community leader who pointed out that Buddhists ought not, in any case, to use products with animal ingredients. The same individual also advised the team, however, that some practitioners and community leaders who had become engaged in awareness campaigns had felt themselves alienated and even threatened by their communities, since it was felt that they were betraying their cultural history and traditions.

The team heard from various sources that TM practitioners, pharmacists, importers and suppliers, whilst having a much greater awareness of the threat to well-known endangered species, shared the ignorance of their British counterparts with regard to the wide range of CITES-listed species that are used in the medicinal trade. It was pointed out, though, that the number of major importers is limited and that they are a suitable target for education.

The team heard from various sources of an aspect that is worthy of close consideration when TM practitioners and pharmacists are being encouraged to employ alternative ingredients, be that substitutes for potentially toxic substances or for endangered species parts. Depending upon domestic law, and the subsequent regulation of both TM products and its dispensers, possible alternatives may be viewed by law as medicinal drugs and, hence, controlled and not available to persons other than registered doctors. That fact may well have to be taken into account at international level when alternatives are proposed. After all, what might be acceptable in one country for use by a TM practitioner may be outlawed in another.

The general public

The team received a presentation at Los Angeles Zoo of an interesting project that has used schoolchildren to deliver conservation awareness to their peers.. Students and teachers who volunteer to become Wildlife Ambassadors receive training inputs and support, which then enables them to spread awareness of CITES and other conservation issues through their own school, neighbourhoods and to others further afield. The team **commends** this initiative to other Parties. Details of the project were apparently available at the 10th meeting of the Conference of the Parties but the team is unaware of it being copied outside the United States of America yet.

The team was pleased to learn of the work being done by the American Zoo and Aquarium Association through its school programme (Suitcase for Survival and Cargo for Conservation) where it encourages teachers to receive awareness training and then spread the message of the importance of CITES. Training materials are provided with assistance from USFWS and NGOs. Successful programmes have been initiated in Chicago, Los Angeles, New Orleans, Miami and New York.

The team noted that WWF-US is soon to publish a module on the wildlife trade designed for use in middle school grades and developed in conjunction with teachers.

Aspects for Improvement

Although the USFWS has a proud record of providing assistance to other CITES Parties, the team noted with disappointment a general lack of international liaison by their enforcement division, especially in the follow-up to seizures. The team **suggests** that more routine contact with counterparts abroad, either direct or via Interpol or the World Customs Organization, would not only

assist in identifying offenders and illicit trade routes but would notify relevant nations of illicit exports or re-exports across their borders.

Whilst not truly a matter for improvement, the team noted the USFWS's experience and success in conducting covert investigations and operations. It **suggests** that the illicit tiger trade is very worthy of attention and would welcome the expertise that USFWS Special Agents could bring to this field, particularly if it has officers of a suitable ethnic background to infiltrate the black markets or trade routes.

Although, at present, there seems to be little evidence of an illicit trade in tiger skins or other tiger parts (aside from the traditional medicine trade), the team noted the substantial number of captive-bred tigers outside of zoos or species survival programmes. Many are seemingly kept in circuses or associated with places of public entertainment, together with those held by individuals as exotic pets. There have been reports that 'canned hunts' have taken place within the United States of America where persons pay to hunt and kill captive-bred exotic species, including tiger. The team believes that the limited domestic control, other than the interstate commerce provisions of the Endangered Species Act, over the ownership of such captive-bred specimens offers an opportunity for the laundering of wild-taken specimens. It **suggests** the situation is worthy of close monitoring or further research.

VIET NAM

Tiger conservation issues

Habitat

There are 100 protected areas, including 11 national parks and 85 nature reserves. The first national park was created in 1962 and in the past seven years 500 of the 700 residents in the 'core' area have been relocated, it being national policy not to allow people to live in protected areas.

Viet Nam has some experience of eco-tourism but this has been restricted to coastal areas and marine turtles. The team believes that Viet Nam's countryside could be a major attraction but, unfortunately, the thick forest terrain does not lend itself to the ready viewing of the wildlife it supports and may require specialized promotion.

Population studies

Viet Nam estimates its total tiger population at between 200 and 250 animals, living mainly in remote areas and border regions. The figures result from surveys using questionnaires and interviews with local residents and officials. A field survey, based on pugmarks, in the southern part of the country estimated 20 tigers in two provinces there. Habitat fragmentation is regarded to be a major threat and may be having a serious impact upon genetic viability.

The team noted that in Viet Nam, as in some other range States, there could sometimes be confusion between tigers and leopards among villagers. Indeed, it understands that the word 'tiger' may often be used to refer to a range of cat species.

Conflict

Although there are some reports of tigers conflicting with humans and livestock this is not regarded by the government as a problem. The government values tigers so seriously that there is no policy of responding to such reports by shooting or capture. There is no compensation scheme for owners of livestock killed by tigers. There appeared to be no information on how residents responded to any conflict cases.

Legislation

Viet Nam's Forest and Development Law of 1991, together with various decrees, establishes protection for indigenous species, sets hunting seasons and lays down legal methods for taking and killing animals. It provides for prison sentences in the case of serious offences.

A draft law has, however, been prepared that will more fully take cognizance of the Convention and the team was impressed by its comprehensive nature. That said, there appears to be adequate legislation at present to control wildlife trade and deal with illicit activities. The team was told of one tiger poacher who had been sentenced to five years imprisonment.

Viet Nam's law does not take account of Resolution Conf. 9.6.

Practical Controls

CITES administration

Viet Nam acceded to the Convention on 20 January 1994 and it entered into force there on 20 April 1994. One Management Authority and two Scientific Authorities have been notified to the Secretariat. Five persons are employed by the government in Hanoi to deal with CITES administration and to advise enforcement authorities.

Enforcement staff

Whilst the Police, Army Frontier guards and Customs officials all have the potential to become engaged in enforcement, the prime internal responsibility rests with Forest Rangers.

There are 8,500 Forest Rangers stationed throughout Viet Nam's 61 provinces, although they are absent in the three provinces that do not have forests. The country has 45 inspection stations at its national and provincial borders.

The salary scales of government and enforcement officials are often so low that many people have a second job or engage in private enterprises to gain additional income. Forest rangers are more poorly paid than Police, Army or Customs staff. It is hoped to introduce a bonus scheme for staff who make confiscations and also a reward scheme for informants.

That said, the team was told of successful interceptions of illicit trade, especially in primates, and of one case of the confiscation of a tiger cub, which had received considerable publicity. In 1998, enforcement personnel were responsible for 1,159 seizures of wildlife, involving 10,466 individual specimens and amounting to a total weight of 94,374 kg.

Live animals that are confiscated are either released back into the wild, sent to rescue centres, or housed in the zoos in Hanoi or Ho Chi Minh City. Viet Nam has no captive-breeding programme for tigers.

Weapons are widely available owing to Viet Nam's history of armed conflict but all privately held firearms require to be registered with the Police. It was acknowledged, however, that an unknown number were illegally held. Fortunately, armed conflict between enforcement personnel and poachers is very uncommon.

The concept of establishing areas where legal hunting could take place is being considered and officials believe that, if implemented, this could help reduce illegal hunting and poaching.

Illicit trade

Government officials believe that poaching and illicit trade are mainly conducted by ethnic minorities. The team was told that officials and others who have knowledge of the trade believe that a significant number of poached tiger parts are smuggled across the border to China,

although local demand is also present. The team heard of illicit activities along the Viet Nam/China border that were alleged to involve Triad gangs. Viet Nam appears to be regarded as a transit point for illegal specimens smuggled from Cambodia and the Lao People's Democratic Republic, with forest paths and mountain routes being used to avoid checkpoints.

There are no agreements in place that allow direct contact between enforcement staff and their counterparts in neighbouring countries.

Illicit trade in primates is regarded as a major problem, although poaching of rhinoceros also takes place. Viet Nam's Scientific Authority is also concerned about the trade in insects, particularly butterflies being sold to tourists. Many new insect species are being discovered in the country and the Authority believes that CITES-listing will probably be sought.

Whilst involvement of officials in poaching is not thought to occur, the team was told that there is some suspicion of government personnel co-operating with traders.

Domestic markets appear to contain considerably fewer items on open display than neighbouring countries. When the team visited Hanoi's wildlife market, primarily selling birds, only a small number of reptiles were seen to be on sale. Specimens of CITES-listed species were seen, however, on sale at Hanoi and Ho Chi Minh City airports.

Traditional medicine

The team was told that a substantial demand for traditional medicine products containing bear, monkey, snake and plant ingredients still exists. Viet Nam has bear farms to cope with domestic demand. It is illegal to sell tiger products although the team was told that imitations could be seen in markets.

Education and Awareness

Enforcement personnel

One of the individuals responsible for CITES administration in Hanoi has attended training courses in Hong Kong and the United States.

Using foreign aid and NGO support, 10 training courses have been held in the past five years for Customs, Police, Army Frontier staff and Forest Rangers. Some 150 Rangers a year also receive a day's input on CITES matters during a 5-7 day workshop. CITES is covered during Rangers' initial formal training. The CITES Scientific Authority assists in all training sessions.

Traditional medicine practitioners and consumers

Although there is no national education campaign relating to traditional medicine, posters have been produced to help raise awareness of endangered species.

The general public

There are 54 different ethnic minorities in the country, with 40 separate languages. However, 50 per cent can speak the national language of Kinh and there is a 98 per cent literacy rate in Viet Nam.

Environmental concerns are included in training schemes relating to agriculture within rural communities and WWF has been working with government agencies to develop awareness initiatives in schools and these appear to have been very successful and highly popular with pupils. The team **commends** this work and believes it may be of interest to other range States.

The team was advised that the government is seeking to improve the living standards of rural communities, especially those living in the buffer zones surrounding protected areas to

discourage entry into the forests and to involve them in conservation. Officials are conscious of the importance of allowing residents to benefit from natural resources in a sustainable manner.

The team heard that whilst the government appears willing to fund conservation initiatives, long-term projects are less popular and conservation may not be a high political priority. That said, one of the four Deputy Prime Ministers has the environment within his portfolio.

Viet Nam does not have any national NGOs that could contribute, practically or by education, in conservation issues. The observation was made, however, that the Youth Union could provide a potential avenue for raising awareness.

Aspects for Improvement

In keeping with recommendations agreed at meetings of the Conference of the Parties, the team **suggests** that specialized enforcement units be created to concentrate their efforts upon the illicit taking of and trading in CITES-listed specimens. The units should be suitably trained and equipped for that task and should co-operate with other national enforcement agencies.

However, recognizing that this is unlikely to be achieved in the short term, the team **recommends** that supplementary practical advice be provided to operational personnel as a priority. For example, it suggests that the type of manual that has been prepared by TRAFFIC for use elsewhere in Asia be adapted and translated into Kinh and widely distributed among, in particular, Forest Rangers.

The team believes there are sufficient grounds for suspicion that illicit trade in endangered species remains a problem in some areas. It **recommends** that investigating the level and nature of such trade should be a priority for the specialized units that it recommends be created. Thereafter, enforcement and education projects should target any trade identified.

The team **encourages** Viet Nam to continue its efforts to draft new legislation and recommends that the CITES Secretariat should assist by reviewing the draft, once available. It **recommends** that any new legislation should take account of Resolution Conf. 9.6.

The team **recommends** that Viet Nam draw upon the experience of other range States in developing initiatives that will assist tiger conservation, whilst also being of benefit to local communities.

The team **recommends**, similarly, that Viet Nam draw upon the experience of others in developing and instigating conservation awareness campaigns. Such campaigns should specifically target illegal hunting of and trade in endangered species.

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Young Citizens Conservation Corps, The Student CITES Project

Annex 1

India

Population Studies

The statement that some NGOs believe that actual numbers of tigers may be considerably less, perhaps fewer than 1,000 is based on wishful thinking. It would not be proper for the mission to record figures that are not substantiated by data and scientific explanation.

The plaster cast and monitoring the animals coming to water holes during the visit of the team to Sariska Tiger Reserve was no part of a systematic animal count. This was more in the nature of a demonstration. Due safeguards are taken in the process of estimating tiger populations to eliminate counting animals more than once. The census methodology does not rely exclusively on pugmarks.

Conflict

Core areas of most tiger reserves still have some human habitations. The Government of India has taken action to re-locate villages from within the core areas of several tiger reserves in the country.

India, being a federal State, each State Government is free to decide the amount of compensation to be paid for the loss of animal and human life caused by tigers. The Government of India issues the general guidelines in this regard, and provides financial assistance to compensate for such incidents that may occur within protected areas and on their fringes. It would be unusual if a person was killed by a tiger and compensation was not provided, except if that person was a trespasser or an encroacher. There is no resistance to the introduction of the scheme. In fact, the scheme is already in full operation.

Legislation

The primary responsibility of implementing the provisions of CITES in India, rests with the Custom Authorities. Implementation of the provisions of CITES is done through the Customs Act. The forest officers, however, provide technical assistance in the identification of wildlife articles being exported or imported under the provisions of CITES.

Enforcement Staff

The remarks of the team regarding corruption and collusion, based on hearsay, are not warranted.

The remark of the team that it saw little evidence of national co-ordination between various agencies is not correct. India has a special Coordination Committee for wildlife enforcement under the Chairmanship of Secretary, Environment and Forests with Special Secretary, Home, Ministry's representative, Chairman, Central Board of Direct Taxes, Director, CBI and Director Revenue Intelligence as its members. The S.C.C. reviews the progress and implementation of enforcement of WLPA by these departments in periodic meetings. The biggest evidence of the co-ordination is that very senior officers of the Customs Department and Director, Revenue Intelligence participated in the meeting organized by the Ministry for discussion with Mission Members. The remarks of the mission are nothing but evidence of increased co-ordination between various enforcement agencies.

GTF was established with permanent FC account to receive funds for tiger conservation from any source. Anybody can contribute money to GTF if desired. They can also indicate the country for which the money is meant for. The remarks of the Mission regarding Government practices not having changes since the time of Independence, only because one senior official had expressed this opinion in his individual capacity, are not justified.

The WPSI and other non-governmental organizations are doing good work and they have the full support of the Government. Most of the time, the reports of WPSI are based on information provided by the State Government and about the cases detected by the Government machinery. The last

sentence of the paragraph should be deleted as in a big country like India, the NGOs role cannot but be gap filling only.

Judicial System

The prosecution of offenders under the Wildlife (Protection) Act is invariably done by Government machinery. WPSI, however, has filed several PILS seeking intervention of the Court in some grey areas.

Illicit Trade

The illicit trade in wildlife products is continuous mainly because of the demands of the wildlife products in developed countries. It is because of the failure of the developed countries to seal the illegal market that substantial portions of India's wildlife resources are found in their trade markets. If the developed countries could prevent entry of wildlife products within their jurisdiction, illegal hunting can be reduced substantially. The role of CITES comes here, otherwise CITES will become redundant.

As regard lack of infrastructure for enforcement, the developed countries have to realize that within its financial constraints, India has contributed significantly to conservation efforts. It is for the developed countries to contribute more towards tiger conservation if tiger is considered a global heritage. Further, if they could control wildlife crime in their own countries, the pressure of illegal poaching would be substantially reduced.

Traditional medicine and other uses

There could be some use of tiger parts in TM in India, but this never led to mass scale poaching of tigers. It is only national sports, increased hunting and international demand that started populations of tiger declining.

Wide publicity has been made in India of the bilateral agreement between India and China about the ban on use of tiger parts but the criminals have their own information network and they know the potential market. Their business is not based on the information provided by the Government system.

There is negligible use of tiger medicinal products in India. However, this consumption has never been a primary cause of illegal hunting of tiger.

Education and awareness

Regular training programmes for various enforcement agencies are being conducted by Wildlife Institute of India. WWF-India has also been involved in the process. The Institute of Criminology of the Home Department, as well as the National Institute of Central Excise and Customs also run short term courses/special lecture sessions in wildlife enforcement.

General Public

It would be appropriate for the international community, particularly the developed world, to declare how much money is collected in their countries in the name of tiger conservation and what percentage has been made available by them for the Tiger Conservation Programme in India. 60% of tiger populations are found in India. Therefore, at least 60% of the money that is collected by NGOs in the developed world in the name of tiger conservation must come to India and find its passage to the field of conservation practice.

The part of the last sentence should be replaced by "the scheme failed because of improper selection of beneficiaries and lack of proper supervision of the scheme".

Aspects for improvement

The Government of India is willing to accept any help that comes for anti-poaching work in protected areas. Some State Governments have already established registered societies that can accept donations directly from donor countries. It is expected that similar mechanisms would be developed in other States. Donors must be ready to spend more money on tiger conservation in India. If necessary, they can channel funds to India through the Global Tiger Forum also.

The suggestion of the team regarding the creation of specialized enforcement units is most welcome. Action on this aspect has been initiated but lack of resources is going to be the limiting factor.

The Government of India started initiatives for taking support of communities in conservation efforts as early as 1983. The National Action Plan and the report "Eliciting Public Support for Wild Life Conservation" dealt with the issue at great length. Different Ministries in the Government were also consulted. A scheme for eco-development of people living in and around national parks and sanctuaries was launched by the Government of India in the year 1991-92. However, the mission has failed to take any notice of these initiatives.

It is felt that the team's report is heavily tilted in favour of NGOs and the efforts of the Central Government and the State Government have been undermined whether it is because of lack of appreciation or by design.

The Netherlands

In regard to illicit trade: The impression that anyone could enter warehouses in the port of Rotterdam and change labels is not correct. Access to goods and containers will not be granted without special permission from Customs. If fraud is suspected access will be refused and in case of illegal activities or goods Customs can prosecute. It was noticed however that in the past re-labelling had occurred in warehouses to change the character of some medicines, so that they could get round the specific Law on Medicines. This was not related to CITES specimens.

Besides that, as written in your report, the authorities in the Netherlands are aware of communication with requests from TM suppliers to manufacturers abroad for re-labelling or re-naming (using numbers or codes) of CITES-related ingredients.

The Netherland Authorities have noticed in general that there is less knowledge and awareness about CITES-plants ingredients in TM products. So far the infringements on TM products in the Netherlands, as described in the report, were related to plant specimens.

United Kingdom

Traditional Medicine

The suggestion that the TM community is insufficiently involved in the preparation and delivery of educational campaigns is rather harsh. The TCM community were involved in the preparation of our recent tiger poster and, more recently, the UK's Central Office of Information carried out research, and sought the views of TM practitioners and advice from the Chinese Medicine Association of Suppliers (CMAS) in developing and casting a new TM television advertisement.

Following consultation with TM practitioners and the Chinese Medicine Association of Suppliers, DETR is currently producing a television advertisement aimed at the Chinese communities of the UK and other European countries, encouraging TM users and practitioners not to use endangered species, particularly tigers in medicines. The advertisement will be in Mandarin and Cantonese and may also be dubbed into other languages for use elsewhere (such as India). DETR will also be producing a new leaflet for TM practitioners in the UK, which is intended as a guide to help them ensure that they have complied fully with CITES controls.

Customs comment that the conclusions reached here are not entirely true. Cases in other countries of fatalities resulting from the use of TM's containing toxic plant material have recently resulted in the Medicines Control Agency notifying Customs of a ban in the use of medicines containing ingredients derived from the plants *Aristolochia* and *Stephanie* (the latter due to its frequent use in association with *Aristolochia*). The UK has in fact taken note and acted upon the issue of toxicity in traditional medicines, the incidence of cases abroad and the findings of international research.

Aspects for Improvement

By agreeing with others' comments that fraudulent application for sales exemption certificates for skins and mounted specimens should be made more difficult, it is inferred that there is in fact a problem in the UK with such applications. Whilst we would not argue with the premise that fraudulent applications should be guarded against, we are not convinced that this is a particular problem in the UK.